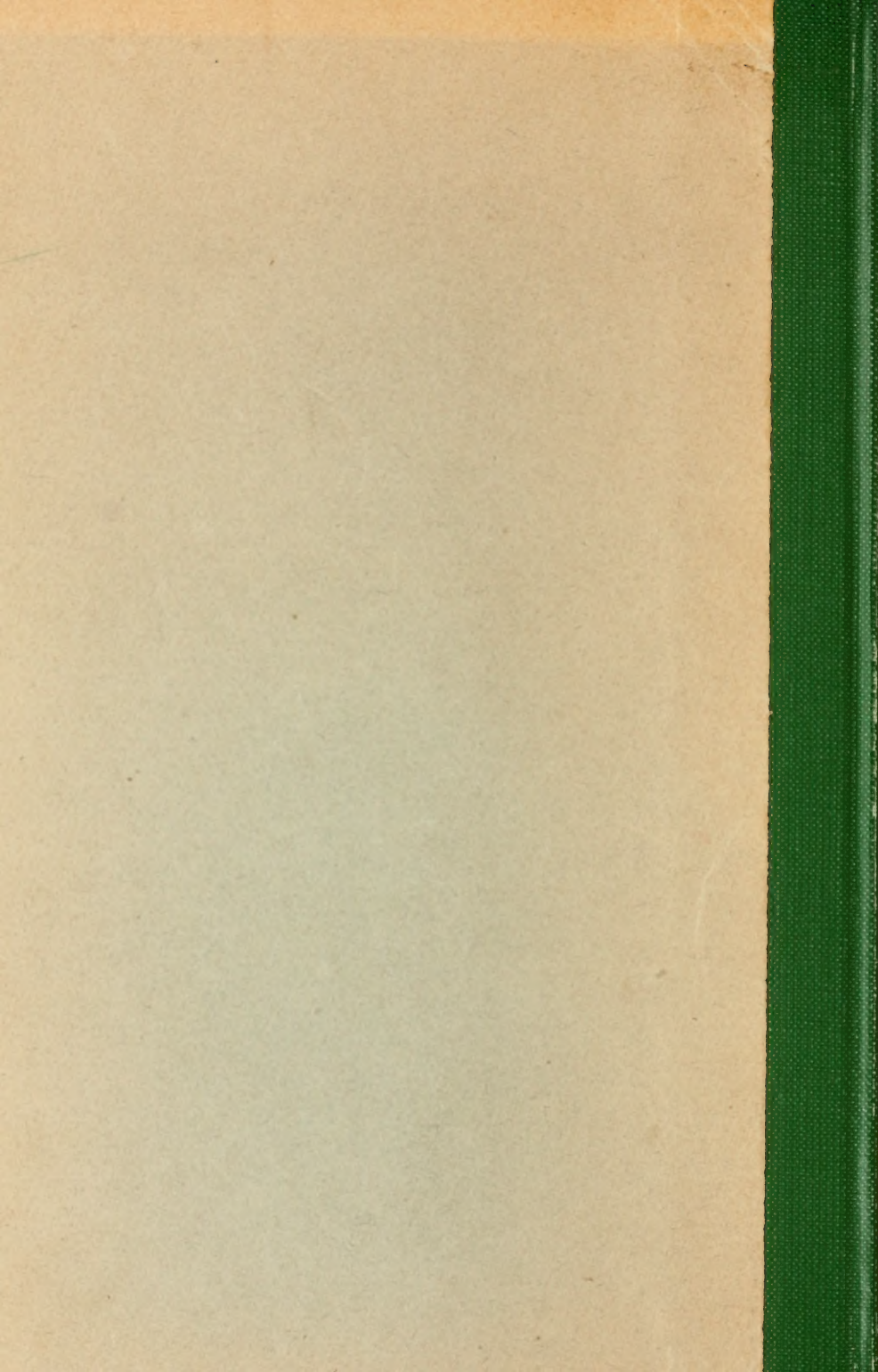




The Journal of Sociologic Medicine

Continuing the Bulletin of the
American Academy of Medicine

OCTOBER, 1917

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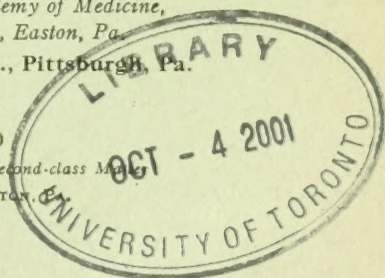
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The Journal OF Sociologic Medicine

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THE AMERICAN ACADEMY OF MEDICINE is not responsible for the sentiments expressed in any paper or article publishd in the JOURNAL. While the Editorial Management prefers to follow the suggestions of the Simplified Spelling Board, as it is empowered by vote of Council to do, the wishes of the authors in connection with the orthograpy of individual papers are respected.

EDITORIAL.

"THERE'S A REASON."

Those of our readers who are kind enuf to note critically the character of each succeeding number of the Journal will find that there is a difference in this number, and there's a reason.

The Secretary of the Academy who is also Editor of the Journal, has joined the Medical Reserve Corps, following the example of the Assistant Secretary. The President is a member of the local board of the examiners for the Selective Draft. The President-elect is also engaged in Government Service, paying special attention to possible tuberculosis in the Recruit, while the Deputy Secretary has resigned to do her bit in the War Department at Washington.

This combination has a tendency to disorganization, and the temporary editorial staff, while doing the best they can, cannot fill the places of the regular staff.

We crave your charitable judgment and loyal support. This is not intended as an apology, only an explanation.

This condition may possibly prove a blessing in disguise, if because of it there should be new workers found to assist in the conduct of the Journal.

The war has developed a spirit of service beyond the fondest hopes of the most optimistic.

It ought not be an extravagant hope that this self-same spirit may actuate some of the Fellows to accept the editorial oversight of the departments of the Journal, and thus out of our weakness will be made strong.

Apropos of the discussion at the last meeting of the American Academy of Medicine, the beginning of which is published in the present number, the following quotation is made. It is from a paper on the "Effects of Race Intermingling," by Dr. C. B. Davenport, and read before the American Philosophical Society last April:

To sum up, then, miscegenation commonly spells disharmony—disharmony of physical, mental and temperamental qualities and this means also disharmony with environment. A hybridized people are a badly put together people and a dissatisfied, restless, ineffective people. One wonders how much of the exceptionally high death rate in middle life in this country is due to such bodily maladjustments; and how much of our crime and insanity is due to mental and temperamental friction.

This country is in for hybridization on the greatest scale that the world has ever seen.

May we predict its consequences? At least we may hazard a prediction and suggest a way of diminishing the evil. Professor Flinders-Petrie in his essay on "Revolutions of Civilization" suggests that the rise and fall of nations is to be accounted for in this fashion. He observes that the countries that developed the highest type of civilization occur on peninsulas—Egypt surrounded on two sides by water and on two sides by the desert and by tropical heat, Greece, and Rome, on the Italian peninsula. It is conceded that such peninsulas are centers of inbreeding. Flinders-Petrie concluded that a period of prolonged inbreeding leads to social stratification. In such a period a social harmony is developed, the arts and sciences flourish but certain consequences of inbreeding follow, particularly the spread of feeble-mindedness, epilepsy, melancholia and sterility. These weaken the nation, which then succumbs to the pressure of stronger, but less civilized, neighbors. Foreign hordes sweep in; miscegenation takes place, disharmonies appear, the arts and sciences languish, physical and mental vigor are increased in one part of the population and diminished in another part and finally after selection

has done its beneficent work a hardier, more vigorous people results. In them social stratification in time follows and a high culture reappears; and so on in cycles. The suggestion is an interesting one and there is no evident biological objection to it. Indeed the result of hybridization after two or three generations is great variability. This means that some new combinations will be formed that are better than the old ones; also others that are worse. If selective annihilation is permitted to do its beneficent work, then the worse combinations will tend to die off early. If, now, new intermixing is stopped and eugenical mating ensues, consciously or unconsciously, especially in the presence of inbreeding, strains may arise that are superior to any that existed in the unhybridized races. This, then, is the hope for our country; if immigration is restricted, if selective elimination is permitted, if the principle of the inequality of generating strains be accepted and if eugenical ideals prevail in mating, then strains with new and better combinations of traits may arise and our nation take front rank in culture among the nations of ancient and modern times.

This suggestion like all made by Dr. Davenport is worthy of further study, and should be kept in mind in all discussions upon the effect of modern civilization upon disease.

We have but recently had our attention called to a paper by Dr. Donald B. Armstrong and J. H. Berkowitz of the New York Association for Improving the Condition of the Poor. It is entitled "An Urban Community Plan for Health and Medical Service" and is reprinted from the *Modern Hospital*, May, 1917. The first paragraph in reality states the problem:

Workers in the social, health, and medical fields have long realized that, whereas the rich can buy expensive and efficient medical service and the poor are assured of comparatively adequate, if not luxurious, medical provision in public or semipublic medical dispensaries or hospitals, the better-paid wage-earners and the moderately salaried middle class are largely unprovided for. They are not willing to avail themselves of reasonably efficient free medical service and not able to afford professional specialty service.

Briefly, the plan is the establishment of a health institute in connection with community centers. The institute is to include a clinic, home nursing, social services and general education on health matters. The plan is as yet in the making, and it may be unfair to criticise it adversely were it not for the purpose that such criticisms may be helpful in the production of a scheme that will provide for this great need.

The first objection to the plan as outlined is that it would not fulfill the purpose. The wealthy get the proper medical attendance thru an abundance of consultations. The very poor secure the same by team work in hospital and dispensary. The plan as outlined does not provide a sufficiently large staff to accomplish this.

Second, any scheme for medical attendance upon the self-respecting moderate income class must be self-supporting. To appropriate funds from other sources of income to meet deficiencies at once makes the scheme a charity, and open to the objections of a free dispensary.

Third, the fee suggested is not sufficient properly to recompense the physician and would tend to place the health institute upon the level of a medical club.

Thus we quote:

If in the general medical service the physician employed received possibly \$5 for two-hour clinic, and saw fifteen patients during this time, he might have five new patients paying 50 cents apiece (\$2.50) and then old patients paying 25 cents apiece (\$2.50), and the service would meet the professional charge.

Twelve minutes is not enuf time to give for the examination of a new patient and but scant attention can be given to old patients if but six minutes were allowed to each. Even were it possible to give proper attention to fifteen patients in two hours, five dollars is not enuf compensation for the amount of service rendered. A conscientious physician will not attempt it. A conscienceless one would not give service worth five dollars.

These are not captious objections, because the objector believes that the medical care of self-respecting people with moderate incomes constitutes one of the greatest problems in social medicine to-day; one that requires the earnest effort of the keenest students among social workers and physicians. It is because of its importance that every proposal for its solution should receive serious consideration; should be subjected to the most severe criticisms that the ultimate outcome may be at once satisfactory and successful to patient and physician.

Seldom does the opportunity come to make one dollar do the work of three, but such is the present opportunity to many of the Fellows of the American Academy of Medicine.

By the payment of fifty dollars as a life membership fee, the Fellow discharges his financial obligation to the Academy for all time saving himself the thot of the payment of dues and incidentally saving the Academy the stationery and postage to send bills and receipts.

Then by this payment it materially strengthens the resources of the Academy by increasing its permanent interest-bearing fund, and the third use of the same dollar is to be found in the resolution of the Academy to invest whatever may be received for the permanent fund in Liberty Bonds.

The same fifty dollars caters to his ease, strengthens the Academy and makes him a patriot.

"WHEREAS, many ignorant and unskilled persons in physic and surgery, in order to gain a subsistence, do take upon themselves to administer physic and practise surgery in the City of New York to the endangering of the lives and limbs of their patients, and many poor and ignorant persons inhabiting said city, who have been persuaded to become their patients, have been great sufferers thereby. For preventing such abuses for the future, be it enacted that no person whatever shall practise as physican or surgeon before he shall first have been examined and after due examination of his learning and skill, shall be approved and admitted to practise."—*From the First Medical Practice Law of New York, June 10, 1760.*

CIVILIZATION AND INSANITY.¹

By CHARLES W. BURR, M.D., Professor of Mental Diseases, University of Pennsylvania, Philadelphia, Pa.

Illuminatingly to discuss the two important questions, first, the relative frequency of mental disease in savage and civilized races, and second, how much, if at all, and in what way, the position of a race in the scale of civilization influences the type of mental disease occurring in its members requires that one should be not only a psychiatrist but an ethnologist, an anthropologist, an archeologist, a historian, and a sociologist. I should like to be all these, but I am only one, and therefore all I say is said with the reservation that I must not be held to too strict an accountability, because in all but one of the subjects my knowledge is only second or third hand. My real purpose is to stimulate discussion and to learn the thoughts of others.

First, we must be clear on a few preliminary matters. Insanity is not one thing but several. The word is merely a convenient collective term including conditions brought about by qualitatively unlike causes and giving qualitatively unlike clinical pictures. We call the state in which there is a mere abolition of mental function because of some gross disease or injury of the brain (this may come to anyone), insanity; we also call that condition in which there is not destruction of the thinking machine and no gross lesion but in which there is a perversion of function caused probably by some inherent defect in the organism, insanity. Again insanity does not consist only in disorder of pure intellect, of pure reasoning, but there is also always aberration of the moral sense, indeed, the disease almost always first shows itself, first becomes manifest, by some fault in conduct, some act showing a moral defect, and this is the more important factor.

A primary preliminary question is, has man progressed since primitive times in morals and mental power, *i. e.*, has the civilized man to-day greater mental ability and a higher moral sense than his early uncivilized ancestors? If he has improved in mind and

¹ Read at the Forty-second Annual Meeting of the American Academy of Medicine, New York City, June 5, 1917.

morals, then we should expect to find to-day a change in the type of disease, its symptomatology, and a decrease in frequency, save when the disorder is caused by destruction of brain matter from trauma or gross disease, unless, indeed, the very fineness and complexity of the machine has made it more liable to get out of order. On the other hand, if some new physical disease competent in and by itself to produce mental aberration should arise, and if in civilized races the struggle for existence should become continuously harder than it is in the savage state, the insanity rate would increase. There is, I believe, a dispute among sociologists as to whether the struggle for existence is greater in savage or civilized life. The poetic believers in a golden age of savagery hold that the rich and successful in civilized countries, in their desire to subjugate the poor have made the struggle much harder; the biologists seem to think that the stress of life remains about the same but that the causes of it have altered.

As to morality, assuming that the savage races of to-day correspond with primitive man of the early ages, then primitive morality varied with different races. Certainly it is so among the few remaining savages to-day. Some tribes whose intellect does not seem to be high, yet have a high moral sense and live good lives. But good living may be the result of no temptation to bad living. Thus a recent writer praises the morals and civilization of the Esquimaux because they have no tribal wars. But are they tempted to fight? Some savages are good-hearted and good-natured to an extreme, others are the reverse—some pacifists, others militarists. Some are persistent thieves, some never steal; but what temptation is there to be a pickpocket in a trouserless land? So far as I can learn, a majority of the writers on the subject favor the view that even in historic times there has been a development of the moral sense among the European races. Certainly, even though we do not live up to our ideals, they are higher as regards our duty to our neighbor than were the ideals of either the Greeks or the Romans, the first of whom were surely our superiors in intellect. The Germans alone, among Europeans, seem to have reverted to ancestral type and to have shed characteristics acquired during centuries. There also seems to have

been an improvement in the attitude of the man towards the woman. Let me hasten to add, I do not mean the attitude men have taken toward the very recent movement for the emancipation of women, which, however, really seems to be not recent but somewhat old, Aristophanes having written several plays about it.

As to whether there has been any evolution in individual mental power since the earliest times, there seems to be quite a difference of opinion. The question is bound up with another, namely, whether all races have the same ability to advance in civilization or whether certain of them are inherently superior. One recent writer is strongly of the opinion that all races are mentally equal and that it is only accident and chance, geographic and climatic conditions and the like, and not inherent superiority that have made certain races masters. He does not seem, to some critics, to have made his point. He says, certain races have ruled because they took advantage of the other, more innocent peoples, but this certainly means, however wicked they were, they were more canny and canniness is a mental quality. Certainly the negro in Africa had during many centuries as much external chance as the inhabitants of many other countries, but he did not progress. Ability to progress in civilization does not necessarily mean increase in the mental power of individuals from generation to generation but only ability to retain what has been attained and, not using any more mental power, add something to the store received. My own opinion, given only for what it is worth, is that while races vary greatly in mental ability, no race has increased any in capacity within historic times and probably not since the earliest time that man was distinctly man. I believe, *e. g.*, that the men who drew animals on the walls of the caves of Europe were as much artists, had just as much of the art instinct, as any modern. They had not their tools, nor anyone to teach them and no art tradition to draw from. The first man in any tribe into whose head there came the thought to reproduce things seen was a genius, no matter how crude his effort. I am aware that some authorities believe the cave artists were not artists but drew as children draw. This does not appeal to me. Certainly the men who in different parts of the world invented the

wheel, the lever, the plough, the rudder, were just as much inventive geniuses as any of the great moderns. The men who invented the folk lore tales were not inferior even to the greatest poets of historic times; they were almost equal to the writers of free verse in the American press. Curiosity to know is the test of the scientific side of civilization. The savage has no curiosity. The early man, who, looking at the stars, wanted to know what they are, had much. He was a man of science no matter how ignorant. Instrumental music seems largely modern, but that is because it depends so much for its expression on mechanic arts, themselves dependent on the sum of centuries of mechanic invention. Whether the modern man appreciates music more than primitive man of superior race is doubtful. In pure science, our present advanced state is not the result of increased mental power but it is the sum of past experience. In philosophy, it does not look as if we had advanced at all—the great riddle remains unsolved and paranoiac mysticism still plays a large part. Surely, if a modern were thrown wholly on his own resources, in a wilderness, he would not show much greater mental power, much greater ability, would not fight the battle better, than primitive man. I am sure were I cast away on a desert island without matches, I could not make a fire, and though I had all the varieties of seeds our kind Department of Agriculture gives away, I fear I should fail in cultivating them. Altogether it looks as if man had not evolved more mind than he started with.

As to insanity. Does the modern mind, when diseased, present a different picture than the prehistoric? We do not know but we can infer. Are there any types we can exclude? One type of insanity, a definite disease, is wholly modern and seemingly attacks only the civilized and not all races of them. I refer to general paralysis of the insane, which was first described in the nineteenth century. Because a disease is first described at a given time does not prove that it did not exist before but in this specific case it is pretty well established it is a modern disease. It is well proven that syphilis is its one great cause and that it is a disease of civilization. It is never found in savage races even when syphilis has been introduced and affects almost the whole

tribe, possibly because its very virulence on virgin soil, without inherited immunity, causes death too rapidly. It is curious that paresis was unknown among the American negroes of slavery times and for a generation after, but to-day it is growing frequent among them. As to the relative frequency in savages of dementia caused by trauma within the brain, the result of rupture or blocking of a diseased blood-vessel, or the consequence of the very extent of the arterial disease, we have little data. That arterial sclerosis occurs in the uncivilized, and always has, no one doubts, but we do not know its frequency nor much about its results on the mind. As there is not, as a rule, much sympathy for the incurably ill among uncivilized races of to-day, and as there probably was no more in earlier ages, the sclerotic among them probably died before mental symptoms had time to develop.

The same lack of sympathy for chronic illness, a lack not to be wondered at, and considering the condition of uncivilized life, not to be condemned, rather to be praised, probably accounts for the rarity of senile insanity among them. The savage runs his course more quickly than the civilized man. He, and still more she, ages more quickly and when old age comes soon dies. Notwithstanding the isolated instances of great age attained, *e. g.*, by American Indians, as a rule, savage man dies young even if, as is not common in warlike tribes, he escapes death from trauma.

Idiots and imbeciles are not often seen in savage life, if for no other reason, because they have no chance to survive. Take, *e. g.*, the not small number of people who, in civilized races, are mentally weak because of some brain injury during birth. We try strenuously and often with success to keep them alive; among less humanitarian races they die from neglect if they are not deliberately killed. Fortunately, since imbecility caused by such trauma probably is not carried on to future generations, the injury done the race by our kindness is not very great, nothing like so great as will follow other modern movements for reform if they are carried out. As to the frequency of imbecility among savages, not the result of birth injury, but dependent on defective protoplasm, I have not been able to get accurate knowledge. Probably few of this class survive because they are non-social and, there-

fore, unable to fight the battle of life. Probably relatively few are conceived because there is more degeneracy among civilized than uncivilized races.

Epilepsy has been the most frequent of all brain diseases in all races since the beginning of history and probably was just as frequent in primitive man. We share it with dogs and other animals. I think it is more common among American negroes than among the whites but impressions are prone to be fallacious and statistics on such matters not altogether to be depended on, therefore, I am not willing to speak dogmatically. A few philosophical writers claim, rightly or wrongly, that it is more frequent among the so-called lower races and is not an indication of degeneracy but simply of reversion of type. However that may be, epileptic mania is found in savage races of to-day.

There remains the most interesting group, the essential insanities, the types dependent on congenitally defective protoplasm—paranoia, manic-depressive insanity, and the insanity of adolescence. Do they increase or decrease with civilization, and if they increase is the increase accidental or inevitable?

The most interesting is paranoia. It has well been called the aristocrat of insanities. To fall a victim to it means that twisted and perverted as the affected mind is and always has been, yet a mind has been. One must have some mind to be a sufferer from any of the essential insanities, but one must have an unusual mind to become a paranoic—the common man is spared the possibility. I suppose he is to be congratulated. The great symptoms of paranoia are egotism, ideas of persecution, and a desire to and a feeling that one can settle the question of the universe. The delusions of the high-class, intellectual paranoiacs of to-day center around fundamental things, religion, philosophy, science. Again, there are all grades of the disease from the man who is merely very egotistical, talkative, opinionated, suspicious and conceited up or down to him who knows he is God or the Son of God.

Now as soon as primitive man began to think, he began to try to solve the riddle of the universe. Even as low a race as the Australian bushmen have some slight curiosity as to how we

got here and whither we are going and what makes the wheels go round, or at least curiosity about such matters can be aroused in them. Is it not probable that the geniuses among the primitive races, races superior to the bushman, pondered deeply on the riddle of the universe? Is it not probable that so soon as man developed mind enough for geniuses to appear, the paranoics, who are the bastard brothers of genius, began also to appear, began to talk, and since even to-day paranoics in religion and politics have eager followers in large numbers may it not have been so in prehistoric times? May not talk have had influence then as now? The history of comparative religion gives several paranoics who have influenced history. May not their mental predecessors have influenced man and his history e'er ever writing was invented and when the people were taught only from the mouths of prophets? The rather numerous false mahdists who from time to time appear in Africa to-day probably are only links in a chain of mental perversion which started aeons ago.

All things mental hang together and what kind of insanity a man will develop depends on what kind of a man he is, what his psyche is. Now, though mania and paranoia are as far apart as the poles, when we compare typical cases, yet they run into each other at the ends, so that it may be equally justifiable to diagnose a given case as mania or paranoia. Mania is the more frequent, because to produce it does not require that the machine be so complicated, so finely organized. Mania is about as frequent in savage man to-day as in the civilized. It probably always has been so.

Finally, we come to adolescent insanity, the insanity which comes not, so far as we know, from external stress and strain but from internal weakness, and appears during that period when the mental machine is put to the test of development and shows whether it can grow or not. I believe, but I would like to be proven in error, that it is an insanity of civilization and is the consequence of protecting the weak. In primitive times the weakling had no more chance of survival than he has in savage tribes to-day. Civilized races (and especially the Americans) are trying to frustrate nature and are making every effort to prevent the weak

from paying the natural penalty for weakness. Their very weakness has become their strength. Such a policy will not strengthen the race. It has increased and will still more increase the rate of occurrence of adolescent insanity.

DISCUSSION.

Dr. S. A. Knopf, New York:

I am sure we have all been greatly instructed, but I cannot say comforted, by Dr. Burr's paper. The author has given us some very sad facts, and I know from experience in our own State here that the insane population is increasing twice as fast as the sane population. What I should like to have heard and what I hope Dr. Burr will mention in closing, is what we can do to minimize this fearful scourge of insanity. His suggestion as to the isolation of all of the defectives—can probably never be carried out. We are supposed to be humanitarians, but are we really humane regarding the defectives? I wonder if it would be not more humane for us to put a stop to procreation by the acutely tuberculous, the mentally unfit, the insane, the chronic alcoholic, and the chronic criminal. It seems to me that this would be the better solution. Let me quote a case in point: A woman had stolen a sum of money to purchase food for her five children. Her husband having tuberculosis was not allowed to work at his trade of a garment worker, by order of the Board of Health. Nevertheless, he kept on procreating. The woman was acquitted, the judge deploring the fact that there was no birth control. I know of a sadder case; a woman who developd puerperal insanity but made a good recovery. She and her husband were cautioned not to have any more children. Being devout Roman Catholic they did not believe in birth control. She had a second child with a second attack of insanity. The birth of a third child followed and now the woman is hopelessly insane. Here, as well as in cases of epileptic persons, it seems to me that a wise legislature can do a great deal. The acute syphilitic should not be permitted to procreate any more than the acutely ill tuberculous. In prevention lies, to a great extent, the solution of the problem how to check the ever-increasing amount of insanity, epilepsy and similar diseases.

Dr. J. T. Searcy, Tuscaloosa, Alabama:

The question of insanity is one of the most important of the day. It is a fact that insanity is increasing faster than the population. This is the case in the United States and in all civilized countries. During the ten years covered by the last census, the population increast 18 per cent, that of the insane hospitals 28 per cent. The taxpayers are complaining. In New York one in 270 of the population is in the insane hospitals; in the West one in four or five hundred; in the South one in six to eight hundred. The question brings up a most im-

portant inquiry, of what insanity is. A definition which I use is that it is an extreme grade of mental deficiency or defectiveness that brings the person within the jurisdiction of some court. A court alone can pronounce a man so deficient or defective mentally that he is insane. All patients within insane hospitals have been committed by a court. That implies only the extreme grades of mental deficiency and defectiveness are committed to such institutions, for their own or others' welfare. Short of them there are all grades still at large from one of a harmless, subnormal condition to one requiring legal attention. A psychosis is simply an external exhibition of a brain abnormality. There are all grades of psychoses. The causes of psychoses are innumerable. There are in our schools to-day an increasing number of children not able to keep up with their classes—dullards. Deficient and defective children are appearing in the feeble-minded schools, in the almshouses, in the reformatories, in the industrial schools, and in all places for caring for such children. Inebriate hospitals, epileptic colonies, prisons and reformatories—indeed, all such places for adults are becoming more and more crowded. The insane hospitals are clamoring for more room. This shows it is a matter of concern to everybody. It is a question as complex as human society, still, in my opinion, is of easy explanation in many particulars. Brain heredity is just as much a matter of fact as of any other organ in the body. In this regard we pay no attention to posterity, in the selection of parents, consequently we are multiplying those who are inefficient and defective in their brains. Everything contributes in civilized society to allow these persons to multiply themselves. They are allowed to propagate themselves without instruction or restraint, sex appetite alone governs it. Eugenics means, principally, the selection of parents with reference to their brain qualifications. Those best qualified as a rule multiply least. The mating of men and women, as a rule, has no reference to posterity, and the least competent multiply most. Nor do we pay attention to brain hygiene. There are many things which tend to impair brain functions, among them is intoxication, from within and without. Auto-intoxication from within, and drug intoxication from without are most common factors. There is throughout our society an increasing consumption as luxuries of toxic narcotic agents, which impair brain structure. The chemical action of caffeine, nicotine, alcohol, morphine and cocaine on the high grade brain structures is deleterious. They have their effect throughout society in increasing the tendency to psychoses and neurasthenias. This question is too large to be talked about in this connection; I have just thrown out a few thoughts upon this increasingly important matter.

Dr. E. H. M. Sell, New York:

While not an alienist I would venture a few words. I went abroad after graduation and studied in Vienna and Berlin. I am sorry that we have only the aged and the middle aged here this morning. Where are the young alienists of the Academy? It is for them that I would say a few words.

There are species of insanity that came right into my life; cases of melancholia and of puerperal mania and some bordered on insanity and some upon suicide. The little that I knew and studied helped me. I never missed curing one of these cases. If we take the cases early in their development we can cure them. Something was said about the choice of parents; I touched upon that yesterday. I was very particular; my great-grandfather was a Revolutionist and fought in the War of 1812. My two sons were down at the border for five months. There was not one word of complaint; it is good training. To-day they are up in the Seventh Regiment ready for any emergency. Sometimes I think I show a little sign of insanity, but if you worked your brain as I have for so many years, perhaps you would be just as bad.

Dr. Edward Jackson, Denver, Colo.:

Biologists, and archeologists are of the opinion that the human brain has not increased materially in power since the earliest times of which we have evidence. Their conclusions may be correct as to the things popularly taken as evidence of increased brain power, as regards the achievement of civilization. But they by no means exclude a slow process of evolution which has not made sufficient change to be very evident. Perhaps the question must remain to be settled by new evidence and tests. It seems to me suggestive and important to consider insanity, or increase of insanity, not as a function of civilization but as a function of rapidity of change in conditions of life, brought about by civilization; not that increase in insanity belongs *per se* to civilization, but rather to the rapidity of changes in the environment of individuals that civilization has brought about. Connected with that is the thought that the most important prophylactic measures lie in the direction of not changing too rapidly the essential conditions that bear upon mental development and mental exercise. A very large proportion of our cases of tuberculosis are traced to a too rapid change from conditions of open air living. It is possible that diminished muscular development might ultimately be entirely compatible with general health, and yet if the change comes too rapidly it undoubtedly is accompanied with serious disturbance with the balance of health. It is profitable to speak of the matter of insanity as related to the rapidity of the changes of civilization rather than to their ultimate direction or character.

Dr. Franz Boas, New York:

The increase of insanity which has been observed may be due to several causes. It may either be that the standard of the whole population declines, but so far as I am concerned I do not believe that proof for such a decline has been given. The relative increase of insanity may also be due to an increase in the variability of the whole population without any actual decline of the standard. We are able to count statistically the number of individuals that

fall below a given standard of mentality, and that develop pathologic conditions, and which find their way into institutions under state control. We have, however, no way of counting the number of individuals of unusual excellence. In order to prove that the standard of the population declines, it would be necessary to show that there is not a corresponding increase of individuals of high mentality. Examination of the conditions of modern civilization makes it plausible that an increase in variability exists, which may account for the increase of the mentally defective and insane, setting aside entirely the question, in how far the lowest limit of normality may have been raised.

Regarding the question of birth control, I think it obvious that everyone ought to be in sympathy with this movement, in so far as the decrease in the number of those who are sure to be defective is concerned. I do not believe, however, that we are in a position at the present time to foretell what individual will be defective and what not. There are a few, a very few, cases in which hereditary transmission of defects has definitely been proved. Even in these cases the elimination of a strain, which on the average will be below normal because it contains many defectives, will also eliminate a considerable number of normal individuals included in this series. We need a much more painstaking investigation than has ever been made of what is due to environmental causes, and what is due to heredity, before we accept practical measures. Up to the present time a clear and definite distinction between the influence of environmental causes and the influence of heredity has not been given.

Dr. J. E. Tuckerman, Cleveland, Ohio:

Although it is quite true that environment has a distinct effect upon individuals, it is also quite true that social service and welfare workers have gone to the extreme in giving the impression that all conditions of mental impairment are entirely due to environment, which, of course, is fundamentally wrong. I have been much interested in the matter of the inability of State organizations to take care of their defectives. I am still more interested in the outcome of the present system of caring for those of low mentality and of fairly good physical condition and who in the ordinary condition of life would have lost out in the race for existence. Girls of this type are placed in institutions where they are instructed at large expense to the State and at the end of three or four years placed out as domestics. To all appearances they are fairly capable, good cooks. Unaware of her parentage the young artisan meets such a girl and marries her. Statistics show a return to our institutions of an average of 50 per cent of the children of such marriages. The same method of education is followed and the next generation of defectives is placed out on society and the process repeated. This, of course, is all fundamentally wrong and I hope the time may come when in talking of eugenics we may forget much that is said about the matching of perfect individuals, and give attention to preventing the reproduction of the three per cent. of culls at the bottom of civilization.

Dr. S. A. Knopf:

I should like to ask Dr. Burr if he can explain why, if children are born with a hereditary taint, diseases are not considered hereditary. I have thought and taught that tuberculosis is not usually hereditary, and that there is but very rarely direct bacilli transmission. Further study has convinced me that the toxins developed in the actively ill tuberculous mother have a most deleterious effect upon the cell life of the fetus. It is said that there are a great many insanities due to toxins; why may not other toxins have a deleterious effect upon the life of the child *in utero*.

Dr. J. E. Tuckerman:

The question of heredity is always one of interest. I have in mind the family of a Dr. Cooper in which there was a distinct tradition that any member of the family who became sick with typhoid fever would die from nephritic insufficiency. It would seem that we deal not only with the transmission of the thing itself but with the transmission in respect to certain organs of a lack in the coefficient of safety.

Dr. Burr, closing:

The question of heredity is, of course, fundamental and very complicated. I believe that the kind of brain the child has depends upon the kind of brain that his ancestors had. In other words, I believe that mental function, or ability to mentally functionate, is an hereditary thing. An infant may inherit a brilliant brain, have a blow, or scarlet fever, which will knock heredity out entirely. As to the heredity of mental disease, I have never seen a paranoic, adolescent insanity, manic-depressive insanity in which the family history was clean. Invariably there has been some mental taint. Every physician sees a great many patients whose family history he does not know. He has given to him that which is a lie. But after patients have been with us for a time, if we keep our eyes open and study the characters of the fathers and mothers, we gain bits of knowledge here and there. I don't think it needs to be proven that the ability for mental work is inherited.

Again, the heredity of disease is not direct. The manic depressive does not have a manic-depressive child; the paranoic does not have a paranoic child, but they have some sort of defective offspring. The great trouble about regulating these marriages by law is that the very people who ought to be controlled are the very ones we cannot control. A brilliant hysterical woman is a very bad mother from an alienist's point of view. The man or woman whose love for himself or herself is so great that they have lost their love for mankind does not make a desirable parent; people who run after quack religious cults are the mothers and fathers who feed the springs that make the river of degeneration large. You cannot prohibit those people from marrying. You could not have people enough to examine them. Alienists and sociologists would not agree. I am not at all convinced that

the movement for birth control is going to do us any good. In the first place, all the mothers and fathers that I know, know just as much about how to prevent conception as I do. In the second place, if we by the public press, or in any other way, spread this knowledge, the children not born will not be the children of epileptics, of the insane, of the tubercular; they will be the children of the fathers and mothers who are too lazy to take the responsibility of parenthood. The epileptics will go on. They are not going to use means of control. The average epileptic does not care; the insane and the degenerate do not care. Furthermore, if this knowledge is made public, if the married know how to prevent conception, the next step will be that the unmarried will ask why they should not have the pleasure of matrimony without the burden. For these reasons I do not think that the birth control movement is going to work out very well. France has not had birth control by law, but France to-day is suffering from the lack of men. Because French thrift has thought it better to have one daughter that she may have the "dot," one boy, that the ancestral farm may not be divided too much, she has not increased her population, and now when this great war comes she is almost bled white because she has not enough men. So that altogether I do not think very much of birth control. I believe the increase of degeneracy is largely due to the fact that we carefully preserve every degenerate that is born. In some primitive races such were simply allowed to die. Many an imbecile boy in Pennsylvania and New York receives better care than the average boy. One way to overcome the increasing degeneracy is for the State to take care of all imbeciles. We have been waiting for years for that in Pennsylvania. At present there are 10,000 imbeciles at large. Most of them could work the farms. In some States a sexualization of imbecile girls has been done. I personally know of several instances in which the result of this has been that all the bad boys and all the bad men of the country town in which such a girl lived knew that she could not be impregnated and she became the subject of venereal disease. The only solution is to keep such girls in an institution. No boy over ten should be taught by a woman. Boys are being taught that they must be kind, must be gentle; that they must regard the poor cripple as a thing to be pitied, almost to be loved. When you rub that in too hard, when that boy develops in adolescence he does not have the strong subconscious hate that the ancient Greek had for the deformed and falls in love with the weak rather than with the strong.

CIVILIZATION AND INFECTIOUS DISEASES.¹

By EUGENE R. KELLEY, M.D., Director, Division of Communicable Diseases,
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LACK OF RELIABLE DATA IN PAST.

All attempts to measure the precise effects of infectious diseases upon civilization, or the effects of civilization upon the propagation or suppression of infectious diseases, are subject to serious limitations because of the lack of reliable data in the past as to the origin, differentiation or prevalence of nearly all of our now well-known infections.

I feel that this statement is perfectly justifiable, despite the dogmatism with which some medical historians have definitely assigned place, time and circumstances of origin to various infectious diseases. Scholarly members of our profession, after very careful historical research, have demonstrated to their own satisfaction that bubonic plague was unknown in ancient Egypt, and others have equally convincingly shown that it flourished there from time immemorial. Others have definitely assigned the downfall of Greek civilization to the introduction of malaria at a relatively late date in the world's history. All such conclusions may be characterized, in the phrase of one of my old professors, as "very interesting, if true." The most striking of all these controversies, and one that bids fair to rage on for decades, is the one over the question of the American or non-American origin of syphilis. Apropos of this controversy, Osler remarks: "It is rather absurd to call attention, as is so often done, to the obscurity which enwraps the origin of syphilis; for it is an obscurity about which there is nothing odd and one which syphilis shares with many diseases."

In fact, for the great majority of our infectious diseases reliable differential diagnostic data cease comparatively soon as we go back into the centuries. We know that under such convenient generic terms as "pest" and "leprosy" the ancient and medieval medical authorities disposed of a large number of diseases which

¹ Read at the Forty-second Annual Meeting of the American Academy of Medicine, New York City, June 4, 1917.

we now recognize as entirely distinct from each other. Because our first clear differentiation of scarlet fever only goes back to Sydenham, or of smallpox to Rhazes, no one to-day considers that these dates mark the beginning of these two maladies. This fase of our subject is largely a matter of assumption and when not pure assumption often a question of applying precise shades of meaning to the medical frases of antiquity that would no doubt vastly astonish their authors. Personally, I prefer to assume that measles, scarlet fever, diphtheria, typhoid, smallpox, typhus, tuberculosis, malaria, etc., have flourisht "*ab initio*." Nor do I think it requires nearly as great an exercise of the powers of faith and imagination to believe that Imhotep the Wise, simultaneously prime minister, chief architect and surgeon-general to his royal highness, Zoser, Pharaoh of Egypt, may have had to wrestle with the problem of epidemic cerebrospinal meningitis or typhus in his huge camps, where dwelt the thousands who labored in the construction of the earliest of the great pyramids (about 3000 B. C.), as it does to believe that Egypt at that era was immune from the plagues and pestilences with which the very name later became synonymous.

CIVILIZATION AS THE CONVEYOR AND ALSO THE CONTROLLER OF INFECTIONS.

The foregoing, however, does not mean that we cannot trace in dim outline some of the reciprocal effects of civilization and infectious diseases upon each other far back into the past. In addition to the common endemic infections which have indisputably been the common heritage of the Aryan race for several centuries at least, there are certain other diseases which have at various periods of time come upon the European world from without its borders, devastated widely and then for a time entirely receded only to recur again at a later period. Conspicuous among such diseases are Asiatic cholera and bubonic plague.

The progress of civilization has more than once spread far beyond its nativ habitat some previously restricted infection with most disastrous effects. Yellow fever and more recently trypanosomiasis are notable examples of this fenomenon.

In yet other instances the diseases of civilization have swept thru the virgin soil of savage populations with most appalling results, as in the classical case of measles among the Fiji Islanders. Furthermore, however much we may to-day smile at earlier views concerning the spontaneous origin of "pythogenic disorders," springing from filth in general, it must not be forgotten that the gradually increasing ideals of personal cleanliness that have gone hand in hand with the progress of civilization were alone sufficient to banish some of the most frightfully virulent of infectious diseases from which our ancestors suffered, as relapsing fever and typhus. This same attribute of modern civilization, *i. e.*, increasing fastidiousness as to personal and environmental cleanliness, has undoubtedly been a factor of considerable importance in the remarkable decline of typhoid thruout the civilized world during the past half century.

Thus, we perceive civilization has always maintained a two-fold relationship to infectious diseases. It has always been simultaneously a conveyor, and, paradoxical as it may sound, a controller of infections. Sometimes the first effect has been the most conspicuous, as, for example, the greater opportunities for the spread of infection that have always gone hand in hand with increasing facilities for human intercommunication by travel or trade, *e. g.*, the spread of "leprosy" after the Crusades. Sometimes the latter has predominated thru the inhibitive barriers that, consciously or unconsciously, higher standards of civilization have constantly placed in the path of infection. Thruout the centuries, the two influences can be traced, but if we critically scan the entire picture of man's struggle with infectious disease, in spite of our lack of clear differentiation between the individual diseases in the past, we cannot fail to note that the controlling, inhibitive influence of civilization upon infections has become increasingly pronounced as we approach our own times. If we scan the phenomena a little more closely, we see that this disease-controlling power of modern civilization suddenly developed a certainty and effectiveness in the latter part of the nineteenth century for which history can furnish no parallel. The cause of this is no mystery to us to-day. It is a commonplace—so much of a commonplace

that we are apt to overlook the fact that the events which took place in that brief period—still within the memory of thousands of living men—constitute, for our purpose, the establishment of a totally new type of civilization, which I will call “Bacteriologic Civilization.”

Just what the science of bacteriology may yet mean to civilization, we may only dimly surmise as “thru a glass darkly.” What it has already meant is stupendous. It means as much to modern man in his struggle against infectious diseases as the discovery of fire meant to primitive man in his struggles against carnivorous beasts. So suddenly has it revolutionized our conceptions of man’s old adversary, so speedily placed him in full daylight, where previously he had stumbled hopelessly in the dark, that we can almost without rhetorical exaggeration assign the very day when civilization’s long and oftentimes hopeless fight against infectious diseases definitely gained the offensive for all time. It was the day when Pasteur, with his simple conclusive experiments of the flasks of wine, put the quietus upon the old doctrine of spontaneous generation, a doctrine whose mischievous application to the field of epidemiology had done so much to retard sane communicable disease control.

TOLL OF INFECTIOUS DISEASES IN THE PAST.

To appreciate adequately what the controlling influences of modern bacteriologic civilization mean in relationship to the spread of infectious diseases, it is necessary to note briefly some of the effects of contagious diseases in the past. Undoubtedly many grossly exaggerated statements as to the number of fatalities abound in the old contemporary accounts of epidemics. After making due allowance, however, for such over-statements, it is very certain that there have been numerous periods since the Christian era in Europe when many more lives were lost in three consecutive years by individual epidemics than have been lost in all the battles of the present war. The most notable example is Hecker’s conservative estimate that at least one-fourth of the entire population of Europe, or 25,000,000 souls, died from the plague within the decade following its eruption into Europe in 1348.

Even when the more or less uncertain data of the middle ages are left behind, the ravages of certain diseases within relatively recent periods seem to us almost unbelievable. Smallpox averaged a full half million victims yearly in Europe during the eighteenth century. Typhus fever, so-called, which frequently also included typhoid and relapsing fever, raged so extensively that millions perished from it and Hecker remarks: "During the eighteenth century, we find scarcely a year without references to epidemics of typhus, great or small, in one part of Europe or another." Asiatic cholera, apparently unknown in Europe prior to the nineteenth century, has achieved the sinister distinction of repeating, even within the era of bacteriologic civilization, some of the prodigious records of speedy fatality that characterize the great epidemics of the middle ages. No less than 800,000 deaths were due to it in Russia alone in the last great pandemic of 1892, as well as many thousands of deaths in more restricted epidemics in other parts of Europe and America. The most notable of these and the one upon which the attention of the civilized world was focused, almost to the entire exclusion of the enormously greater Russian mortality, was the epidemic of 17,000 cases with over 8000 deaths in Hamburg. This epidemic is, however, justly celebrated for from its lessons modern preventive medicine learned how to control cholera swiftly and effectively.

THE BACTERIOLOGIC ERA.

This long unbroken record of humanity's helplessness, in the face of infectious diseases, continued from most remote antiquity down to what I have called the era of "Bacteriologic Civilization." True, the pestilences varied in kind from century to century and the individual diseases in degree of intensity and malignancy from decade to decade. Equally true, mankind at times, as in the heyday of Hellenistic and Roman civilizations, by emphasis upon sanitation and by assuring an abundance of nutrition to everyone, managed in some measure to offset his lack of knowledge to the laws of epidemiology. Still later, quarantine restrictions doubtless helped to a considerable degree to mitigate the severity of imported pestilences. But in the last analysis, the most learned

sanitarians of even a half century ago are mentally much closer to Galen in matters of epidemiology than they are to us. Between them and us a great gulf is fixt, an epochal gulf in human knowledge. That mental gulf which all the hoary wisdom of Egypt, the restless intellect of the Greek, the keen minds of the medieval scholastics, and the giant intellects of the Renaissance were alike unable to span, was due to their utter inability to comprehend the world of microscopic life.

The key to many of the riddles of the "pestilence that walketh in darkness and the destruction that wasteth at noonday" was found as soon as that world of micro-organisms began to be explored. The results of that discovery we cannot even yet fully comprehend, but year after year its possibilities unfold before us until now many of us can begin to see in the vista of the not too dim and distant future a world largely emancipated from the bondage of infection, a world with the fruitful trofies redeemed for civilized man's use, assuring for centuries to come an abundant sustenance for all of earth's increasing millions.

If any feel that this is an extreme picture, they have failed to grasp the full significance of the wonder-working science of hygiene during the past forty years. Reflect for a moment upon the practical extinction of yellow fever and typhus fever in civilized countries; upon the almost complete mastery of that old-time king of diseases, smallpox; upon the ease with which our own Federal health authorities held off the last menace of Asiatic cholera; upon the ever-increasing success of our campaign against typhoid; upon the solid gains achieved against that most insidious and strongly entrenched of all our foes, tuberculosis; upon the almost miraculous record against diphtheria. Or, by way of contrast consider what the plague did to the Caucasian race in the days of the "Black Death" and what the Caucasians of the "Bacteriologic Era" are doing to the plague in this present pandemic, and I think we must all agree that no prediction as to victories against infectious diseases can be dismisst as impossible or even as improbable of fulfillment within the coming century if we base our hopes for the future upon the solid achievement of the first fifty years of the "Bacteriologic Era."

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PSYCHIATRY AND SOCIOLOGY.

Emphasizing their *Sociobiologic Relationships*.¹

BY DR. WM. J. HICKSON, Director, Psychopathic Laboratory of the Municipal Court of Chicago.

This paper was prompted by the fact that many large and important sociologic undertakings with almost unlimited finances, support and time, have realized so little due no doubt in no small measure to the unappreciation of the necessity of selecting directors qualified by a sufficiently broad and scientific training.

Psychiatry has been defined as the science which treats of diseases of the mind. Sociology has almost as many definitions as there are sociologists, each one more or less featuring that phase of the subject which most appeals to him. We have selected the following, under similar influences, as emphasizing the human side of the subject, which we desire to discuss in this paper, especially in the matter of social service, namely: Sociology is the study of human association, including whatever conduces to it or modifies it; instead of Psychiatry we might have said Psychopathology, in order to emphasize the fact that psychologic as well as clinical factors are being evaluated.

Someone has well said that "sociology cannot be scientifically discussed apart from psychologic principles;" and we might add that social service work cannot be scientifically discussed apart from psychopathologic principles, for laboratory investigation, that great scientific pathfinder, is showing that most social service work is concerned with sociopathy, which in turn has its origin principally in psychopathy. According to this, then, the definitions chosen for psychiatry and sociology connote almost the same thing. Auguste Comte, who suggested the word Sociology, considered any separation of the sciences which have for their object human society, to be irrational.

This paper is a plea for specialization, for efficiency versus expediency, and the recognition of the importance of psychopathology for sociology, fraught as it is with so much import to

¹ Read at the Sixth Annual Meeting of the Alienists and Neurologists of America in joint session with the Chicago Medical Society, Hotel LaSalle, July 11, 1917.

the welfare of society in general and society's much-too-many, to borrow an expression from Nietzsche, in particular.

Social service work, on account of its importance, is receiving more and more recognition as well as the necessity of turning it over to special workers. Such specialization is shown in the creation by states and cities of departments of Public Welfare, Social Service, and the like, so that now practically all modern cities of any pretensions have established specific bureaus or departments devoted to one or more branches of such work. City and state bureaus are being rapidly organized and the central government itself has recognized the necessity for specialization along these lines by the establishment of the Child's Welfare Bureau, and others. Courts, industrial and other corporations and organizations are establishing welfare bureaus. All this is paternalism of the most positive sort. Apropos of this idea there is no doubt that unisolated nations with average mental levels of intelligence hovering around sixteen years are more in need of guardianship than they themselves, naturally, realize.

The future of the whole social service movement depends largely on the training and proficiency of its leaders. Leadership in this field calls for the broadest kind of training. One must have a certain amount of familiarity with the moral sciences, political economy, jurisprudence, etc., and especially medicine, including normal and abnormal psychology. Medical training will familiarize them with all those biologic sciences such as physiology, hygiene, heredity, etc., and their relation to mental and physical efficiency, which enter fundamentally into their daily problems, enabling them to correlate the various findings and insuring a scientific attitude towards the subject.

The importance and indispensableness of medical training, including psychopathology, for those functioning as directors in the various fields embraced in applied Biology, whether it be applied Sociology, Biochemistry, Psychology, or any of the others, impresses itself upon one as his experience grows. These fields not only call for the highest expertness to direct the daily work that must be taken care of, but also to carry on research, for at this stage of the evolution of such branches as social work, juris-

prudence, etc., it is not to be expected that the social worker, jurist, etc., whose perspective is limited to the daily actualities that confront him in looking after this family or that, or in defending or prosecuting this or that defendant, on which activities hang his daily rewards and compensation, can be depended upon to see much beyond his immediate working horizon and strive towards the ultimate elimination of his field of endeavor, although scientific investigation is demonstrating that most of their work is merely temporizing, and that very little is being really accomplished in the way of immediate positive results to say nothing of those of a more remote but permanent character.

Medicine has now advanced to such a stage that through the study and elimination of causes disease is prevented, with a corresponding decrease of morbidity and mortality, and corresponding prolongation of life and usefulness, brought about through the leadership of its most advanced workers, and to-day prevention is as much a part of the work of the rank and file of the profession as it was unobserved by them previous to this era of preventive medicine, when symptoms only were principally focused on. Social workers should be in a position to understand and co-operate with the medical profession and act as a channel for the wider application and dissemination of such information among the laity where it is most needed.

We find the director of social work confronted a hundred times daily with such questions and problems as the following, which, if he is to be efficient, he must be able to answer and advise on intelligently, such as matters of social, mental and physical hygiene, tuberculosis, cancer, venereal diseases, infectious diseases, acute and chronic diseases, diseases of childhood, school inspection, public health, child and woman labor, hours of labor, physical and mental fatigue, dietetics, nursing, operations, hospitals, asylums, etc., traumatic neuroses and psychoses, obstetrics, gynecology, skin diseases, constructions of various institutions, mental and physical working capacity, mental and physical adaptability, rehabilitation of individuals and families, necessity for institutional care of this or that nature, etc., in fact all those industrial and social problems that involve questions of medicine.

With medical and psychopathologic training the director can eliminate much of the lost motion now entailed in transporting such cases for diagnosis. Endless lay committees have undertaken the solution of the various problems embraced in applied sociology, with a net result of zero. If these problems were to be solved that easily, without expert training and knowledge, they would have been solved long ago. The more advanced social workers are recognizing that thus far, under the old methods, they are arriving nowhere, that there has been a richness of opportunity but a poverty of results: and the laboratory is now being consulted daily by these advanced students concerning their problems, and they are bringing their cases in for diagnoses, prognoses and for suggestions as to treatment, disposition, etc.: in fact, this makes up a fairly large part of court and laboratory work.

The psychopathic laboratory, through information it can bring to bear on cases coming through the specialized courts and criminal branches, has socialized these courts to a very high degree. Such courts, with their social service attachés, are one of the most efficient pieces of social service machinery there is for constructive work in this field. Only those familiar with the work of these courts can fully appreciate the extent of their accomplishments along these lines.

The medico-sociologist will be our mainstay in working out the solutions to the pressing problems of this field in the way of intelligent legislation, penal, moral, etc., involving vital questions which must be decided by experts and not left to passions, prejudice, near-knowledge, or ignorance. He will above all recognize the law's limitations in dealing with human nature and, therefore, search for and devise other more appropriate measures based on an understanding of the underlying causative factors which will protect them from becoming fetich worshippers of forms, formulas and jargon, to the neglect of the living realities with which they are trifling. We should not try to decide on what ought to be until we have a knowledge of what is. Artificial laws will have to make way for natural laws just as rapidly as the latter are discovered, and if such expediency is to make way

for efficiency, science will have to become the arbiter in all our social service work.

It must be remembered that the factor responsible for a large percentage of social service work lies in that two per cent mentally defective group of our population representing feeble-mindedness, psychopathy or both, which group keeps the other ninety-eight per cent. busy looking after it. This will be the group that most of your energy will have to be spent on: its members make up the bulk of our dependents and delinquents, nature's step-children and prison fodder. Everyone working in the social service field, whether specializing in penology, political economy, regardless of what school one adheres to, ethics, or what not, will have to contend with this small but potent group. It is this ever-present two per cent that confronts the social worker at every turn, whether in dealing with crime, dependency, alcoholism, unemployability, and at least as contributing, directly and indirectly, to parasymphilitic diseases, etc. This same group in its various relationships is none the less potent to general medicine than it is to social medicine. We see that the same defective constitution that is responsible for mental defectiveness is responsible for the hundred and one other physical defects that medicine treats, such as hypertrophied tonsils, adenoids, malalignment of teeth, etc., though here medicine can do something where the defective parts are get-at-able, and while we should correct these defects whenever possible, in order to improve the general well-being of the individual, we should constantly bear in mind the fact that the removal of tonsils or adenoids, or straightening malaligned teeth does not remove nor straighten the underlying defective inherited constitution. The more we work with this group, the wider it seems to ramify in different directions. For instance, it has been shown statistically that only about two per cent of those contracting syphilis develop what are known as parasymphilitic diseases, such as tabes dorsalis and paresis. We think here again it is the same old two per cent asserting itself as all of the cases we have examined have shown a psychopathic history and heredity markedly above the average, including delinquency in a large percentage of private and clinical as well

as laboratory cases, the latter of course being all delinquents. Many cases, in spite of their psychopathy, unless quite outspoken, do not conflict with the law due to a sufficiency of intelligence until the latter succumbs to the processes of the disease.

In the psychological examination of both our juvenile and adult paretics we find side by side with the mental symptoms common to paresis also symptoms characteristic of their co-existing psychopathy and lending their color to the paretic syndrome. We think we see this same influence active in our chronic alcoholics, among whom we find what is known as "alcoholic delusions of infidelity," where a careful investigation of the previous history will disclose the fact that the individual has shown some time previously more or less outspoken symptoms of a dementia praecox paranoides. Alcoholism was at one time considered a contributing cause of paresis and as a matter of fact it is a concomitant phenomenon in a very high percentage of cases. Since we attribute chronic alcoholism to an underlying psychopathic basis, it may be that it is the common underlying basis of both the paresis and alcoholism. The deleterious influence of the establishment of a vicious circle by the addition of alcoholism to the psychopathy is unmistakable, the endogenous and exogenous factors aggravating each other and pyramiding their bad effects.

Some of the arguments against an underlying psychopathic factor in the production of adult and juvenile paresis is the fact that in juvenile paresis, for instance, we should have at least one parent psychopathic and one parent luetic in order to fulfill our conditions, for if both of these factors occurred in the same parent we should expect to find him or her paretic, which occurrence is thus far seldom recorded. It could be that the psychopathic characters were recessive in both parents and found expression in the offspring. The occurrence of conjugal lues is not uncommon, which would further weaken our theory unless it be in such cases we would find an accentuation of the condition in the offspring. Investigations have shown that from two to thirty per cent of the inmates of feeble-minded institutions give positive Wassermann reactions, but the percentage of these developing juvenile

paresis is very low. We think among the feeble-minded and women much paresis is overlooked but not enough to influence our theories.

In the matter of conjugal paresis, since it appears that "like finds like" in a very large number of cases, that is, that praecox marries praecox, feeble-minded, feeble-minded, etc., and that the occurrence of conjugal syphilis is not uncommon, we should have more conjugal paresis than is reported. Numerous cases of the psychoses such as dementia praecox, manic-depressive insanity, epilepsy, psychopathic constitution, etc., have been reported as having acquired syphilis and no signs of general paralysis of the insane recorded. While our prisons show a higher percentage of cases of syphilis than does the outside population and also a higher percentage of paretics, yet the correlation is not positive enough to lay it to the high percentage of prisoners who are psychopathic and have had lues. This is also true of our moral court cases. The influence of treatment, hypersexuality of many psychopaths leading to more frequent exposure and the possibility of predisposing strains of the spirochete should all be evaluated. The influence of developing paresis on a preëxisting psychosis or feeble-mindedness is also worthy of study. While there is much against our theory yet we cannot help feeling that we have here at least a contributing element, and if our theory is eventually substantiated our prognostic ability in this field will be materially fortified.

We have made this digression in order to exemplify some of the side problems that will be of interest to medical sociology as paretics and their families will often fall into the hands of the social worker, the disease as a rule incapacitating its victim at the height of his usefulness and an understanding of what to do and what to expect in such cases is desirable. Paresis is generally regarded as fatal, and if there is a family of dependents, provision should be made for them with these facts in mind. As is to be expected, there is a large quota of paretics going through our courts unrecognized whose delinquency is but a symptom, an expression of their disease. Paresis is influential in determining

the thinking and doing of its victims much earlier in its course than is generally suspected.

The scientific training of social workers will dispose them to be more receptive to the ultimate as well as the more proximate factors involved in their problems, such as in the matter of environment as against heredity. No one will dispute the influence of environment, but our experience leads us to regard it as extrinsic and heredity as intrinsic. Many social workers, however, are misled by its immanency and immediateness, to say nothing of its convenience besides shifting the responsibility to others and, furthermore, physical and mental examinations require experts. The matter of nature versus nurture might be roughly compared to Weber's Law in psychology, where, within certain limits, stimuli and reactions bear the same relations to each other as geometrical to arithmetical progression. An example of the stressing of environment as against heredity was recently seen where an investigator attributed most of the mortality, morbidity, delinquency and dependency of children to the low wages of the father, adding that higher wages was the solution of the problem, thus entirely overlooking the influence of heredity and its relations to mental and physical defectiveness and not at all concerned with the question as to why the earnings of the fathers and mothers of these unfortunates are so low, why they are idle so much of the time, why they are alcoholics, deserting, neglecting and abusing their families and why there is not the proper educational and parental supervision, etc., not in our opinion that such supervision makes much material difference for if the parents are defective so also the children, and our daily experience teaches us how numerous are those raising above their environment as well as those sinking below it. The effects of our strengths and weaknesses are cumulative in their scope. The scientific worker keeps on going where the unscientific worker rests: for the former there is the eternal why of things and he is constantly investigating his subject with his mind on ultimate as well as proximate causes. The following quotation in the English translation of Lombroso's book on "Crime, Its Causes and Remedies," might not be amiss here.

The effects of such colonial organization are evident. A quarter of a century has elapsed since the arrival of the first convoy of convicts in New Caledonia. Yet there are still no roads there; Noumea has neither sewers, embankments, nor docks. I have reported the facts scrupulously in order that they may serve to counterbalance the assertion that is constantly being made: "Change the environment, and the criminal disappears." Now, here everything is changed, race, climate, conditions—all the causes of crime are removed—and in spite of everything the born criminal continues his series of crimes, while the honest man pays the expenses! What better proof could we have of the supremacy of organic action over environment!

The entire history of criminality as far back as we can go points unmistakably to but one conclusion, and that is that from time immemorial defectiveness and crime have been synonymous. Chief Justice Olson epitomized the whole matter on its feeble-minded side when he said in discussing the problem of delinquency with a prominent social worker who stressed environment, that "when the nineteen year old boy tests ten the black story is told."

It is interesting in this particular to study the early attempts to establish various colonies by the different nations through the deportation of delinquents: and by comparing the outcome of colonies made up principally of delinquents and those of non-delinquents, with and without leaders, in the matter of the occurrence of crime and ability to establish themselves, and even where they have been distributed among normals in an entirely new environment, one is forced to but one conclusion—that then as now the delinquents were also the defectives. One is also impressed in this relation by the apparent foci of insanity in certain portions of the United States even to this day, which show a somewhat higher percentage than the rest of the country, especially in cases of dementia praecox, which were used as delinquent-deportation colonies during the settlement of the country. Even to this day the percentage of mental defectiveness, either feeble-mindedness or the psychoses, is exceedingly high among our immigrants, and there is no doubt much of such immigration is connived at and encouraged by the authorities and relatives, where in most European countries there is a much closer account kept than here of the expenses of such individuals, their dependency and delinquency, both through the communities as well

as the families, and consequently they anticipate every channel possible for unburdening themselves.

One of the first institutions these unfortunates become acquainted with is, of course, our courts. We have been able to deport not a few of these reaching the laboratory through such channels. Think of what a rich field for work the immigrant offers the properly trained social worker, in helping them find themselves, segregate their defectives, etc. Almost daily we have cases in the laboratory, both men and women, who have been in America for from thirty-five to forty-five years and who, with the exception of a couple of simple words or phrases, do not speak or understand English, to say nothing of reading or writing it. Practically all of these are also illiterate in their own language.

The social worker's big field will be in the not insignificant group of the borderland cases. With the defectives they are helpless, outside of recognizing them and seeing to their proper segregation; the normals don't need them. Normality means adaptability. With the borderland cases, however, they will be able to give just that added bit of support, supervision, encouragement, etc., that will save them from themselves. This, of course, will demand the broadest kind of training, that one may have the proper insight, so as to act with intelligence. After the psychopathologist has examined a case he can very closely approximate not only the family history but also the past and future history of the case and what the progeny may be.

For the convenience of the social worker individuals might be graded somewhat after the same system that they are graded commercially, as AA1, AA2, A1, A2, A3, B1, B2, B3, etc., in the latter instance the letters standing for capital and the numerals for credit; in the former the letters would represent the intellectual capital and the numerals the emotivity or affectivity. Both these factors make up the personality. Credit men should consult the latter ratings oftener than they do. The social worker who undertakes to underwrite the success of the borderland case must have the latter's mental rating in order to be able to work intelligently. In both the above ratings the two elements more or less parallel each other, though not necessarily. The quanti-

tative and qualitative relationships of both of these elements are vital to a comprehensive understanding of the case.

It helps materially to divide mental defectiveness into these two great classes, those with intelligence defect and those with affective defect, the former divided into the various mental levels, as idiots, imbeciles, debiles, etc., the latter into the various psychoses, or we may have a combination of both; a veritable case of the blind leading the blind. The psychoses may be outspoken or what is known as latent, the borderland, or semi-insane or semi-responsible. Both of the above great classes, in the vast majority of cases, are hereditary and present from birth, on the intelligence side the mental arrest manifesting itself at various levels and the emotional defects especially under stress, such as physiologic and evolutionary critical periods, shock, trauma, economic, etc. As examples of the critical evolutionary stress we might mention teething, puberty, the ages between forty-one and forty-five, for both men and women, and the senium. Outspoken cases are usually aggravated at these periods and cases that may be considered as latent become frank at these times, as, for instance, at puberty when it is known as adolescent insanity, the senescence as involutional insanity and at the senium as one of the forms of penile dementia. We see these same cases manifesting their psychopathic constitution during the stress of pregnancy, fevers, intoxications, shock as after deaths of relatives, accidents, etc. There are very few schizophrenoids even, if any, who pass through these evolutionary critical periods without expressing evidence of their emotional defectiveness. Someone has well said that it is not overwork but overworry that causes mental breakdown.

Psychopathology is showing more and more that the intellect is only the hand-maiden of the affectivity and not the reverse, as has largely been assumed, and this, no doubt, is one of the causes of misunderstanding between law and medicine, the law holding to the "right and wrong" test, which is an intelligence test dating from eighteen hundred and forty-three, which test medicine has never been able to square up with the facts in a very large percentage of cases coming up for decision since both study and experience demonstrate that it is the affectivity that dominates

our actions. The German criminal code has taken cognizance of this fact in its section on criminal responsibility, which reads as follows: "there is no punishable act, if at the time of commission the actor was in a state of unconsciousness or of morbid disturbance of the mental faculties which excluded the free determination of his will," and in the forthcoming revision it will go further, no doubt, and change the relative positions and evaluations of the two factors.

We think one of the reasons why we have made so little headway with our psychopathic cases and their concomitant delinquency, alcoholism, narcotism, and their psychopathy itself, is because the latter is constitutional and hereditary and consequently not amenable to our preachings, asylums, hospitals, reformatories, penitentiaries, etc. Heredity is the hereditary enemy of medicine and accounts for much of our fruitless efforts at healing, such constitutional factors not having been evaluated and hence therapeutic Nihilism. Many psychoses, however, are what are known as latent and only show accesses of frankness under certain stresses either of a mental or physical nature, too great responsibility on the one hand or a pregnancy on the other. Where the stress can be anticipated, as for instance in the way of appropriate occupation free from undue responsibility, the social worker, who is really a social nurse, will coöperate to this end with the physician.

The social service director in our large industrial corporations must be constantly on his guard in admitting cases from our mentally defective, two per cent group, especially the borderland cases, which are the ones he will have most to do with, making special provision for them. Those who have worked in the neurological and psychiatric clinics on the Continent where industrial insurance is in force will appreciate what a significant role such defectiveness plays not only in causing accidents but also in the traumatic neuroses and psychoses following such accidents. They should be equally guarded against in the Army and Navy. There is no doubt that they are responsible for a high percentage of the accidents occurring in these services as well as untold wastage, prejudice to discipline, morale,

esprit de corps, etc. They swell the list of the invalided immeasurably not to mention their cost to the government in the matter of pensions. After an experience in the field with the troops during the mobilization maneuvers in Texas in 1917, and before, and since then, I am convinced, now that the regulation allows of an increase in the ratio of medical officers, that the appointment of a psychopathologist, if enough of them could be procured, to each regiment would be one of the wisest steps in the matter of efficiency and economy that the medical department could recommend. He would be able not only to exclude these unfortunate undesirables while on recruiting duty, but since he must of necessity be a physician as well as a psychiatrist, neurologist and psychologist, he could take his place alongside of the other medical officers in this capacity. He would be able to anticipate most of the malingering and simulation and by nipping it in the bud eliminate much of this element. His advice would be invaluable in the matter of neurologic and psychiatric matters constantly arising both in war and peace. He could also be consulted in matters of military psychology, mental hygiene, etc., as well as carry on a certain amount of research in these lines. The services are havens toward which these social and industrial misfits drift and there is a higher percentage of them enlisted than is generally suspected.

War psychoses and neuroses, like the traumatic psychoses and neuroses of industrial life and also like the prison psychoses, are the results of the influence of stresses on psychopaths and since such predisposed individuals are certain to develop such psychoses under the stress and strain of trench life at the front and will have to be invalided home and since preparing and placing a man in the trenches is quite expensive, it would be more humanitarian and economical to anticipate the enlistment of such cases for this service; they could be utilized in other ways at home. The first cost of these cases to the government, great as it is, is insignificant compared to their future cost as with such psychoses and neuroses it is a matter of years usually before they can be restored to their former status, if ever, and the matter of treat-

ment with its expensive isolation systems, etc., adds considerably to the expense.

Not the least advantage in having properly trained directors at the head of Social Service Departments will be the influence they will wield on those working under them in the way of proper training along scientific lines and the insight their training will bring to the various problems and their solution. We have recently had a case which illustrates one of the many ways in which such a trained director might have been instrumental in preventing an assistant in interfering in a case where the consequences were quite unfortunate. A young man, age 20, foreigner, in America not quite three years, was under arrest in the Boy's Court, the Director of the Psychopathic Laboratory of the Court found him to be suffering from a rather outspoken form of Pfcropshebephrenia and recommended his deportation to which the Judge agreed, but a Social worker, well-meaning but uninformed, pleaded that he be not deported but be given a sentence instead, as she had been interested in the case for some time in her social service work among foreigners. 'The boy was given a few months' sentence and he was out only a couple of weeks when he was in conflict with the law again. The police report runs about as follows: "Report covering the arrest in a revolver battle with a desperate and heavily armed man by Officers X. and Y. The action of these officers under fire, and the fact that though badly wounded, one of them by 'first aid to the injured' succeeded in saving the life of the man whom he had shot and who tried almost successfully to take the officers' lives, proves their high efficiency and bravery." The individual who had secured a position as a busboy in a restaurant, was discharged and had a quarrel with another busboy over a tip. He picked up a coffee pot and struck the other boy twice on the head, fracturing his skull. When pursued by the house detective he drew a revolver and shot the detective in the abdomen, which came almost causing the latter the loss of his life. Menacing the other employes and special officers, he escaped and entered an eight-story building adjoining, followed by Officers X. and Y., who had been attracted by the shooting. The building into which the boy escaped was vacant

above the first floor, and dark, there being no lights. The boy ran up the rear stairway to the top floor, and lying flat on the floor, with his revolver between the banisters and the top rail, awaited the officers who followed him. When at the seventh floor, Officer X. called to him that he was under arrest and to throw up his hands. Becoming used to the darkness about them, Officer X. saw the boy's arm sticking out between the rails with the revolver in his hand immediately above X.'s head. The officer again called upon the boy to surrender, starting up the remaining flight of stairs toward him, walking backward so as to face the boy. As the officer approached, the boy fired at him several times, inflicting a deep flesh wound in X.'s right hip. The officer, though wounded, returned the fire and continued to advance, followed by Officer Y. The boy fired twelve shots in all before the officers succeeded in disarming him. In the encounter with the officers the boy was shot once under the right eye, the bullet lodging in his head, once in the neck, and the last bullet severed a vein in his right wrist, breaking his revolver hand, causing him to drop his weapon. Officers X. and Y. took charge of the boy. Finding a vein in his neck severed, Officer X. immediately applied a tourniquet bandage, thus saving the boy from bleeding to death until medical attention could be given to him. The boy and Officer X. were removed in the same ambulance to the hospital. Twenty rounds of ammunition and twelve empty shells were found with the revolver where the boy lay. The boy was held to the Grand Jury in bonds of \$10,000. After a month or two he was able to come into court, where the earlier findings of the Laboratory were brought into evidence, and confirmed by other psychiatrists, and again it was decided to deport him. He was consequently sent in custody to New York after the necessary papers were procured, where he was kept for several weeks waiting for a ship bound for his native land, but on account of the war and the poor prospects of securing such transportation, he was finally brought back and committed to the Asylum for the Criminal Insane. The consequences, which might have been much worse, and the cost of this case to the community, were quite appalling.

When directorships are opened in the various lines of social

and charitable work, institutions, etc., medico-sociologists should put forth their claims for recognition. Universities should recognize the need of such broad medical training, including psychopathology, and institute courses along these lines, as well as provide for the needs of those taking up the work as assistants for similar but more elemental courses in the field of applied biology as it is correlated with applied sociology. There are no substitutes for such medical preparation and practice, as it is the only science we can turn to, prepared to give the systematic and all-round training in the matter of the physical and mental make-up of the individual and his reactions. One becomes enthused at the prospect of what such a trained force could do for humanity, and hasten that time when no one will rest contented or feel happy until all his weaker brothers and sisters shall have that intelligent provision made for them that comes with understanding!

TRANSACTIONS.

ADJOURNED MEETING.

PITTSBURGH, PA., September 25, 1917.

An Adjourned Meeting of the American Academy of Medicine was held in the William Penn Hotel, and called to order at 5 P.M. by Vice-President Van Sickle.

There were present Drs. F. L. Van Sickle, Olyphant; E. E. Montgomery, Philadelphia; George W. Wagoner, Johnstown; J. K. Weaver, Norristown; C. L. Stevens, Athens; John B. McAlister, Harrisburg; Elizabeth Lieper Martin, Atlantic City, N. J.; Spencer M. Free, Du Bois; E. Bosworth McCready, W. M. Beach, Charles J. Steim, Pittsburgh.

In the absence of the Secretary, Dr. Grayson, Dr. C. L. Stevens, of Athens, was elected Secretary *pro tem*.

Dr. Van Sickle reported for the Council that there were three items of business that should be referred to this meeting by the Council, but which could not regularly be done for the want of a quorum of the Council. These items were:

1. The election of two applicants for admission who had received the approval of the Membership Committee.
2. The election of Miss Bessie G. Frankenfield as Deputy Secretary in the place of Miss Elizabeth F. Reed resigned.
3. The adoption of the following resolution proposed by Dr. McIntire:

All papers read before the Academy become its property to be published in its Journal and the acceptance of an invitation to present a paper implies compliance with this rule. Authors of papers desiring to publish elsewhere will be furnished revised galley proofs of their papers so that they can appear simultaneously in any other publication the authors choose.

Upon this business Dr. Van Sickle remarked that numbers one and two were merely routine. As to number three, Dr. McIntire, apprehensive of a failure of the quorum at this meeting, sent this resolution to the members of the Council with the request that if any member objected to its passage he would write at once so that his objection could be presented at the Pitts-

burgh Meeting. Not a single objection was received contrary-wise, eleven members of the Council expressed themselves in favor of the proposed legislation which in effect secured its approval by the Council. He thot, therefore, under the existing conditions that the Academy was competent to transact the business. It was decided that authority be given the Council to enter the transactions on its minutes.

Dr. James Moran, of New York City, recommended by Dr. S. Adolphus Knopf, and Dr. Robert Wilson, Jr., of Charleston S. C., recommended by Dr. Charles McIntire, were duly elected as Fellows of the Academy.

The resolution proposed by Dr. McIntire was on motion adopted.

The report of the Nominating Committee was taken from the table and adopted, a single ballot being cast electing the following officers:

President, Dr. Edward O. Otis, Boston.

First Vice-President, Dr. S. Adolphus Knopf, New York City.

Second Vice-President, Dr. Tom A. Williams, Washington, D. C.

Secretary, Dr. Thomas Wray Grayson, Pittsburgh.

Assistant Secretary, Dr. Chas. Mallory Williams, New York City.

Treasurer, Dr. Charles McIntire, Easton.

Miss Bessie G. Frankenfield, of Easton, was elected Deputy Secretary, succeeding Miss Elizabeth F. Reed.

On motion the Academy adjourned.

C. L. STEVENS, *Secretary pro tem.*

THE CHILD AND HIS RELATIONSHIP TO SOCIETY.

Under the editorial supervision of E. Bosworth McCready, M.D.

PHYSICAL AND MENTAL VARIATIONS IN SCHOOL CHILDREN.

It has not been many years since children, from the pedagogic standpoint, were divided into those who were up to grade and those who were not. The more thoughtful members of the teaching profession were, however, not content with a classification so crude, nor with the acceptance of any classification which did not, at least in some measure, explain factors of causation. It was at about this time that psychology was emerging from the mysticism and obscurity of the middle ages and taking its place as a more or less exact science. From the intimate relationship that modern psychology bears to pedagogy, it seemed that the former might lend the aid desired in solving the problems involved in the study, treatment and education of that large class of children who fail to conform to a more or less arbitrary standard of normality. It was not long, however, before the limitations of psychology, *per se*, were apparent to many, who realized that the psychic factors involved are dependent upon anomalies, deviations, variations, and irregularities in physical structure and function. Thus psychology came to depend more and more upon physiology and pathology, and the psychologist to draw more and more upon the resources of the physician. To some it seemed, since the problems involved in the management of exceptional children were so largely medical, that this was a legitimate field of occupation for the physician, who would qualify his medical training and experience with knowledge gained through the more highly specialized function of the psychologist, and particularly of the clinical psychologist, who, as Haberman says (J. Victor Haberman: "The Intelligence, Examination and Evaluation," *Journal of the American Medical Association*, July 31, 1915, footnote 3), "must first and foremost be a physician."

It is not to be expected that the busy general practitioner, pediatricist or neurologist will have the time, inclination or facilities to study and treat effectively the numerous classes of physical and mental variation with which he may meet. Hence the necessity for a branch of practice which will combine some of the functions of the pediatricist and neurologist with some of those of the psychologist and pedagogue. This is not entirely a new idea, for upon the pages of medical and pedagogic history stand out prominently the names of physicians who have filled these joint functions with credit to themselves and benefit to humanity. Gugenbuhl, Itard, Seguin, though pathfinders who sometimes lead their followers through devious ways, left to posterity a legacy which will never be dissipated. In our own day the name of Dr. Maria Montessori stands out as perhaps the best known, though there are many others—both in this country and abroad—who, approaching the subject from a somewhat different angle, are accomplishing much in this field of endeavor by adding to our knowledge and stimulating interest.

It would seem that the field is sufficiently comprehensive and important to warrant a distinctive appellation for those who confine their practice to this "medico-psychologico-pedagogic function." I have for some time made use of the term "paedology." According to Dr. Henry W. Cattell (Dr. Henry W. Cattell, Personal Letter, Sept. 26, 1913), the editor of Lippincott's "Medical Dictionary," the term "paedology," first used synonymously with "pediatrics," later made to designate "child study," may now be defined, in a more restricted sense, as "that branch of pediatrics in which the physical and mental defects of child development are especially studied and treated by the physician."—From "*Paedology and Its Relation to Pedagogy*," in "*Education*," September, 1917.

The frequent attendance of school children at Moving Picture performances is dangerous to the eyesight, according to W.B. Inglis Pollock, whose interesting article entitled "The Cinema and Children's Eyesight," appeared in the August, 1917, issue of *The Child*.—London. Dr. Pollock finds that the cinematograph is responsible for headaches and other signs of eye-strain in

children and for a very great increase in the number of cases of strabismus convergens, or internal squint. He reports that most of the children squinting had little or no astigmatism; these children showed also signs of congestion of the optic nerves.

The performances may be bettered by improving the movement of the film and by limiting the duration of the "show" to one hour, broken up with certain other "turns." The children should also be seated in the optimum position, which Mr. Bishop Harman defines as in the center line from the screen, and at a distance of about thrice the height of the screen.

Aside from these dangers reference should be made to the indirect effects of bad ventilation and late hours, the questionable morality sometimes inculcated by the subjects depicted on the screens, and the fact that Saturdays are given to the children for open-air exercise.

In conclusion, Dr. Pollock states: "I am constantly seeing young children who have developed squints while frequenting cinematograph displays, and older children with congested optical nerves and eye-strain from the same causes, in the school clinics, in the school inspection, in the Glasgow Eye Infirmary, and in the Ayr County Hospital. I should only allow children to attend these performances once a month, and I would certainly object to the introduction of the cinematograph into school teaching, except at regular intervals."

* * *

THE YOUNG MOTHER.

Alexander Graham Bell's investigation shows her age has a marked effect on the vitality of her children. Infant mortality increases steadily as the mother grows older. From this point of view girls ought not to delay marriage beyond the age of twenty-five.

Abstracted from *The Journal of Heredity*, September, 1917: "There is a growing tendency among women of the most intellectual type to postpone the age of marriage and motherhood. Whereas most women marry between 20 and 25, graduates of women's colleges most frequently marry between 25 and 30. Miss M. R. Smith calculated the average age at which college alumnae wed,

as 26.3 years. This means that to offset the considerable number who marry as soon as they graduate, there are many who do not marry until the age of 30 or after. Feminists without adequate scientific training have attempted to justify this course, and have tried to create an impression that the children of young mothers are in some way inferior, while the best children are those born to women who have reached a certain maturity. In much of the recent periodical literature due to radical feminists, there is a tendency to suggest, if not to declare, that it is to the advantage of both mother and child that women should not undertake the duties of maternity too early.

"Whether or not there are social reasons that make late marriages desirable for girls, will not here be discussed. But as for biology, every eugenist knows of the abundant proof that relatively early marriage is beneficial both to mother and to child. One of the proofs is furnished by a study of infant mortality in relation to age of mother.

"Alexander Graham Bell has recently completed an investigation of the longevity of members of the Hyde family in the United States. They represent an intelligent, prosperous, old American stock; most of the births in the genealogy fall between 1750 and 1825. In general, he shows that a child's chance to survive the diseases and dangers of the first four years depends quite directly on the age of its mother. The death rate for children of the oldest group of mothers is about 50 per cent greater than that of the children of young mothers. The mothers under 20 years of age appear to form an exception. At first sight, the higher death rate of their children seems to indicate clearly that too early maternity is a disadvantage. Without denying this possibility, there are several considerations which make it seem probable that these youngest mothers form an exception more apparent than real to the general biological rule: the younger the mother, the better the child's chance. It is possible that the higher death rate in the children of this group is partly due to the juvenility and inexperience of the mothers, and not to their physical unfitness for marriage. This explanation cannot be pushed any farther, as has sometimes been done, to claim that all infantile mortality

depends more on the intelligence and training of the mother than on her age; for in such a case the death rate ought to be lower with each added year of the mother's age—a supposition exactly contrary to fact. The higher death rate in this first group may also be due in part to the fact that the children involved are practically all first-born, for whom the death rate is well known to be higher than for those who immediately follow them. In the other groups of mothers, the first-born children are swamped by the later-born, and the effect of their presence is not so evident as for the groups of mothers 15-19, practically all of whose children must be first-born. This is a biological matter, but not one which offers any reason for postponing maternity, since if a woman is going to have children at all, one of them must be first-born.

"If these two suppositions are well founded, then the death rate of children born to mothers 15-19 does not necessarily prove, at least to such an extent, as one might think, that the mothers were physiologically too young when they married. The other facts in the table are self-explanatory. While the evidence cannot be considered wholly satisfactory, until data are available which take account of the order of birth of the children, and the intervals between births, as well as the age of the mother at birth, yet the general conclusion to be drawn is clear. The children of young mothers have the greatest vitality, and every added year of the mother's life is a handicap to her next child.

"There is plenty of confirmatory evidence. Three studies of infant mortality in America—Boston, Mass., Fall River, Mass., and Johnstown, Pa.—indicate very clearly this danger of delayed marriage.

"The uniform trend of the data precludes the idea that the death rate is more influenced by the mother's intelligence than her age. It might be, however, that it is largely influenced by poverty. In this view the young mothers would succeed better with their children because they had only a few to care for, while the mothers at the age of 35 or 40 had already large families and too little income to provide the new arrivals with the necessary care. This argument doubtless holds good to some extent in the slums,

but it can hardly carry much weight in the Hyde family, which seems on the whole to have been fairly well-to-do. If both these influences (increasing experience and poverty of mother with added age) were at work, they would tend to neutralize each other, thus leaving the actual results to be attributed to physiological factors connected with the age of the mother.

"In sum, it seems clear that the age of the mother at the birth of her children has a marked influence on their vitality, that as measured by infant mortality the best age for a girl to marry is probably between 20 and 25; and that every year a woman delays childbearing after the age of 25 is penalizing her children."

* * *

"While feeble-mindedness is often found complicated with a criminal life, feeble-mindedness of itself has no necessary connection with criminality. The defective child is driven into criminality by unwise treatment at the hands of people who do not understand him."—*The Child*, June, 1917, Henry H. Goddard.

* * *

"We are losing 100,000 babies every year in the United Kingdom," Sir William Osler said recently at the Annual Lettsonian oration of the Medical Society of London.

"In 1915, while nine of our soldiers died every hour to save their country, twelve babies died at home in the same time, to the scandal of their country." Quoted in article, "The Children of Munition Workers," by Elizabeth Sloan Chesser in *The Child*, July, 1917.

* * *

"CHILD WELFARE WORK IN WARTIME."

Dr. Grace L. Meigs, in an article entitled "Infant Welfare Work in Wartime," appearing in the August number of the *American Journal of Diseases of Children*, exhaustively reviews the Child Welfare situation as it now exists in the various countries now engaged in the world struggle, and draws the following conclusions:

1. No hasty conclusions should be drawn that the war makes immediately indispensable in this country such palliative measures as the increase of day

nurseries or the supervision of pregnant women working in factories, to which dire necessity has driven certain foreign countries. Study is necessary to show how present and future economic and industrial conditions will affect the number of pregnant women and of mothers of young children employed in factories; and what measures are needed under these conditions.

2. The chief preventive measure for protecting babies is to insure their intelligent care and nursing by healthy mothers in their own homes.

3. The disorganization of infant welfare work through the loss of physicians and nurses especially trained for it, is an imminent danger and should be avoided if it can be done. In view of the greater demand for nurses, every effort should be made to enlist a large number of candidates for hospital training courses.

4. The preventive work for infant and maternal welfare, already established, should be strengthened and extended; and nothing should be considered more important in war time.

* * *

"The care of mothers and the protection of children are duties which if neglected bring dire punishment on a people. Amidst the hazards and horrors of war we are realizing the paramount necessity of improving means and methods for the safeguarding of maternity and making provision for scientifically directed management of infancy and childhood."—*From Abstracts and Extracts, "The Child," June, 1917.*

* * *

"War with all its destruction and degradation, its service and heroism, has made us understand better the worth of a child."—*From "The Nation's Baby Week," by T. N. Kelynack in "The Child," July, 1917.*

* * *

"Is it not monstrous that the fate of a new generation should be left to the chances of unreasoning custom, impulse, fancy, joined with the suggestions of ignorant nurses and the prejudice counsel of grandmothers? To tens of thousands that are killed, add hundreds of thousands that survive with feeble constitutions, and millions that grow up with constitutions not so strong as they should be; and you will have some idea of the curse inflicted on their offspring by parents ignorant of the laws of life."—

HERBERT SPENCER.

WILLIAM A. WHITE, THE MEANING OF THE MENTAL HYGIENE
MOVEMENT.

What relation, if any, has the movement to insanity? Insanity is a much misused and misinterpreted word. If taken in its entirety, as it touches in its potentialities and in its expression the social and civic life of the community, it really becomes a social and not a medical word, meaning socially inefficient conduct. The insane, the feeble-minded, the criminal, the neurotic, nervous patients, paupers, etc., are recognized as coming within the purview of the mental hygiene movement. The feeble-minded individual is one who has not developed to the full mental stature of maturity, an adult in years and stature who remains a child in habits and capacities. Mental age may be assigned irrespective of chronologic age. The feeble-minded are often socially destructive and become the burden of the law. Not having the mental capacity or stamina to stand up under depletion of fortune or perhaps physical debility, they permit existing circumstances to put them in the poorhouse. By present methods of examination it is conservatively estimated that 25 per cent of criminals are feeble-minded. The problem differentiates the people into two groups, those who can and those who cannot be saved for social efficiency. For those who can be saved, mental hygiene dovetails with education in helping the child who has lost his balance, to get a sure footing and fitting for some value to society. It helps to readjust the attitude of the child, who, reared under unfortunate conditions and grown up in adversity, sees society as its foe, and mental hygiene is interested in the family situation and in all conditions bearing on childhood. For those who cannot be saved mental hygiene may find ways and means for their adequate provision, not by promiscuous almsgiving, but by careful and intelligent management. Hospitals for the insane and prisons should be the logical places for the working out of these problems. The very breadth of the problems makes their complexity inevitable. But by strenuous, mental intellectual endeavor they should be worked out and a solution striven for.—*"Boston Medical and Surgical Journal,"* CLXXV-8, Aug. 24, 1916, pp. 264-269, J. A. O.; abstracted in *"The Journal of Delinquency,"* September, 1917.

WAR PROBLEMS.

"The supreme test of the nation has come. We must all speak, act and serve together."—
WOODROW WILSON.

In this new department there will appear mention of, and comment upon, some of the important questions of Medical Sociology the World War is bringing into prominence.

The Red Cross has created a Sanitary Service Bureau to help make the cantonments healthful in accordance with its policy of caring for the health of the soldiers and sailors of the United States, as well as that of the civil population. The work of this bureau will center in the civilian areas surrounding the Army cantonments, for such areas will be outside the jurisdiction of the military authorities, and conditions may arise which must be looked after to safeguard the health of the civilians as well as that of the soldiers. In the Southern states, for example, malaria will be kept out of these districts by the extermination of the mosquitoes, and other such plans have been made for the good of those in and around these cantonments.

* * *

The Medical Department of the Army is aiming to have hospitals for 5 per cent of the enlisted forces by the time this is in print, and expects to proceed with this work until 10 per cent of the men can thus be taken care of in this country, and abroad 20 per cent of our forces. At the cantonments something like 3 per cent of the troops can be cared for in hospitals which have been or are being constructed along modern lines. The War Department has announced that 32 hospitals are thus being constructed at a total cost of about \$14,500,000. Some of these hospitals are enlargements or reconstructions of existing institutions. Well-equipped laboratories are being provided.

* * *

Maj. Gen. Gorgas has said, "We intend to make our new military cantonments as safe as science can make them. When a

recruit has once passed his examinations—which will be rigid—he may rest assured that the Government will put him into as nearly an ideal sanitary environment as is found anywhere either in military or civil life.” Some of the best medical men in the country are helping to plan for these cantonments. Dr. Wm. H. Welch, of Baltimore, and Dr. Victor C. Vaughan, Ann Arbor, Mich., two of the best-known Fellows of the Academy, spent much of the summer in Washington in connection with this work. Quoting Gen. Gorgas again: “A million men—as sound of mind and body as we can choose out of the Nation’s youth—will soon be moving into camps and barracks under Government supervision. We want the soldier’s folks at home to feel that he is going to stay sound, that he is not going to sicken in camp without the privilege of striking a blow for his country. That is not mere sentiment. It is good economics. The rule of our medical forces in each cantonment will be watch, watch, watch. Just as we are keeping liquor and vice as far as possible away from our new troops, so, too, we must declare, “No Admittance,” to the germs which have wrought havoc with armies.”

* * *

Special care will be taken of mental and nervous disorders, and, as far as the writer knows, no army has ever had this branch of its medical work better provided for. This will be of interest in connection with Dr. Hickson’s article in this issue of the Journal. Among the Fellows of the Academy who are doing this kind of work in the army, is Dr. Walter E. Fernald, Superintendent of the Massachusetts School for the Feeble-minded.

* * *

In Canada it appears two notable elements have been added to the Government provision for soldiers and their families: First, insurance on the lives of soldiers is carried by various municipalities; and, second, the Dominion has undertaken as a part of its military system the re-education, in a suitable occupation, of the disabled soldier so that he can assume again, in whole or in part, the care of his family.

FROM THE FIELD.

The National Board of Medical Examiners held its second examination in Washington, D. C., June 13 to 21. There were twenty-four qualified candidates, twelve of whom appeared for examination, the others having been ordered into active duty between the time of their applications and the date of the examination. Of the twelve who took the examination nine passed.

The next examination will be held in Chicago, October 10 to 18, and there will also be an examination in New York City in the early part of December.

* * *

An interesting experiment is being tried out in Portland, Oregon, where the Board of Health is making use of the card system for informing patrons of the cleanliness of the various shops they patronize.

A store handling food products of any kind is required to display an "A" card if its sanitation averages 90 per cent or more, as governed by the rules of the Health Board. "B" indicates that the methods of the shop are only up to 80 per cent, and "C" covers anything under 80 per cent. The card must be displayed in such a place that every patron of the shop may see it, and frequent inspections by officers of the city cause this requirement to be obeyed.

Portland is very jealous of her rating as the second healthiest city in the United States, and is doing everything within reason to raise the rating. It is believed that her temperate zone climate and purest of pure water will be materially aided in giving Portland the boost she craves.

A circular issued by the Chamber of Commerce says that a very noticeable improvement in all shops has been noticed since they have been required to advertise the degree of sanitation they maintain. Each merchant seems to be now anxious to get an "A" rating. Some merchants are advertising the fact that their shops rate approximately 100 per cent clean.

The Chicago Rotary Club, with a disinterestedness, characteristic of that association, is seeking to be of service to certain physicians who have gone to the colors. It has been led to believe that many such are embarrassed by unexpired leases which the owners refuse to cancel, believing that such a refusal is not an act of patriotism on the part of the owner, altho strictly within his legal rights. It is desirous of securing definite information concerning such cases that it may bring to bear the powerful influence of publicity. To assist them in this it requests that those having knowledge of such action on the part of the owners of property will communicate the fact to R. R. Denny, Chairman of the Committee, in care of Dennos Food Sales Company, Chicago, Illinois.

* * *

The necessity for registration of births is at last receiving the serious consideration of the people of the United States, so that now the reporting of births to the Health Department is mandatory upon more than a third of the population of the country.

The latest states to be admitted to the registration area for births by the Director of the Census are Maryland, Virginia and Kentucky.

So many possible conditions arise which involve the precise age of the person to be proved by documentary testimony that the citizens of each state should ascertain whether or not there is a birth registration in their state and if not agitate and still agitate until such registration is made compulsory.

NOTES AND NOTICES.

The Association of American Universities at its Eighteenth Annual Conference held at Clark University, November 10 and 11, 1916, had a valuable and interesting discussion on the Report of the Committee on Academic and Professional Higher Degrees.

The trend of the opinion seemed to be that the Ph.D. Degree should be the sole degree conferred for post-graduate work from the Academic Department, but doubts were expressed whether it would be proper to confer it upon advanced work to graduates in

professional schools. Various suggestions were made looking to the establishment of a proper degree to those graduates in professional schools who had taken advanced professional work comparable to the post-graduate work of the Ph.D. Degree.

One speaker regretted that the American custom prevented the use of the M.D. Degree in harmony with the custom applied to other departments of the universities.

This custom has been legalized by the various Medical Practice Acts making it difficult but possible to effect the change. If there be any necessity to designate the completion of post-graduate medical work by a degree, would it not be better to correct the previous fault, however difficult the task might be, than to attempt to adapt one's self to the faulty condition by the invention of new and cumbersome titles? It would require but little legislation to substitute Bachelor of Medicine for Doctor of Medicine in our Medical Practice Acts, leaving the rest of the act intact. Then the Academic world would be in a position to resume the original custom of the University of Pennsylvania, whereby the Doctor was conferred as a post-graduate degree.

* * *

In the discussion of papers and the stenografer's notes thereof: "We offer one Irish potato—a prize of great value—to the man who will say that he has ever seen a man who will say that he said what an official stenografer said he said when he said it."—*Journal of the Tennessee State Medical Association*.

* * *

An English authority has lately pointed out the demoralization to boys and girls caused by the breaking down of clubs and the withdrawal to the army of recreation leaders, and he has traced much of the increase to juvenile delinquency in England to the chaos in recreation activities which has prevailed since the war.

* * *

It is said that medical missionaries employ 16,000 foren doctors and nurses in 1200 dispensaries and 700 hospitals, and minister

each year to the physical needs of over 3,000,000 people. As in civilized countries, these physicians and nurses are doing more than relieving suffering; they are teaching preventiv medicine and doing constructiv work. Nativ physicians and nurses are being trained in many missionary stations where doctors are at work, especially in China where the China Medical Board of the Rockefeller Foundation has decided to give the work so much help, having awarded contracts for two hospitals to cost together \$36,000,000, one in Peking and the other in Shanghai.

* * *

It is announced that the Rockefeller Foundation, in co-operation with the Philippine Government, is arranging to send a hospital ship among the Moros of the Sulu Archipelago. This ship will make a five years' cruise among the southern Philippines where the natives are said to be suffering extensively from such diseases as malaria, hook-worm, dysentery and various skin affections.

* * *

"Medical education is a training to enable a man to derive an income through the practice of a profession."—*Harold F. Gray in an article on "Public Health Work" in "Science" for May 5, 1916, page 641.*

* * *

The National Conference of Charities and Correction has changed its name to the National Conference of Social Work and will hold its forty-fifth annual meeting at Kansas City, Mo., in 1918.

ACADEMY PERSONALS.

GRANDY, DR. CHARLES R., of Norfolk, Va., is a member of the Sub-Committee on Tuberculosis appointed by the General Medical Board of the Council of National Defense.

LOWMAN, DR. JOHN B., has gone to France as a member of the Jefferson Medical College unit.

MARTIN, DR. ELIZABETH L., has opened an office at the Hotel Dennis, Atlantic City.

SHELDON, DR. CHARLES S., of Madison, Wis., who is one of the ex-Presidents of the Academy, and a member of Council, this spring celebrated the golden jubilee of his graduation in medicine.

WHITE, DR. WM. R., Providence, R. I., and Miss Margaret L. Wardle, of Troy, N. Y., were married August 28.

NECROLOGY.

1917. July 17. W. B. Ewing.
 1917. August 31. Levi Springer Gaddis.
 1917. Sept. 18. William Connor Shaw.

LITERATURE NOTES.

ACUTE POLIOMYELITIS. By GEORGE DRAPER, M.D., Associate in Medicine, College of Physicians and Surgeons, Columbia University; Associate Attending Physician, Presbyterian Hospital, New York City, with a foreword by SIMON FLEXNER, M.D., Rockefeller Institute for Medical Research, New York City. Illustrated. Cloth, \$1.50, postpaid. Pages 149. Philadelphia: P. Blakiston's Son & Company.

A compact book of 149 pages combining the clinical, laboratory and experimental data in a particularly helpful manner. The book is an invaluable guide to one in the practice of pediatrics or general medicine in the diagnosis, care and specific treatment of epidemic poliomyelitis. The text is richly supplemented throughout by case histories including the onset, diagnosis, laboratory data, treatment, course and prognosis making the book intensely practical.

F. B. U.

FRACTURE OF THE LOWER EXTREMITY OR BASE OF THE RADIUS. By LEWIS STEPHEN PILCHER, A.M., M.D., LL.D. Octavo, pp. 116; 132 illustrations. Philadelphia: J. B. Lippincott & Co. Price, \$2.00.

Dr. Pilcher's well-known interest in fracture of the radius near the wrist and his original work on the pathology of this injury make this book a valuable contribution to surgical literature. Bone injuries in this region have been notorious for their inefficient treatment. Curiously, the inefficiency has not always been on the part of the members of the profession of medicine

who devote most of their attention to internal medicine. Many teachers of surgery have failed to impress upon their classes the proper treatment of these injuries. This want of effective treatment has in not a few instances been a reflection of the surgical teacher's own improper understanding of the injury and its proper management. Dr. Pilcher's writings in journals and this little book in particular should clear up many obscure points in a manner which will lead to better treatment.

In speaking of the usual fracture, namely, that in which backward displacement of the lower fragment occurs, he says that in its treatment accurate reduction is of first importance, if there exists displacement. He claims that the chief obstacles to ready and perfect reduction are impaction or entanglement of uneven surfaces of the fragments and tension of the untorn periosteal fibrous band, which still unites the fragments posteriorly. The latter obstruction he overcomes by placing the hand in dorsal flexion. While the hand is in that position, extension will disengage the fragments and firm thumb pressure upon the back of the lower fragment will push it forward into place. When the upper fragment has telescoped the lower fragment, so as to split it and drive the pieces of the lower fragment in various directions, the best possible replacement of fragments is to be secured by simple, direct extension with approximation of the disrupted pieces, by pressure of thumb and fingers, as in a molding process. He calls attention to the permanent shortening of the radius to be expected from condensation of tissue when the upper fragment is impacted to any extent into the lower one. This shortening makes the end of the ulna more prominent on the inner side of the wrist and causes the hand to deviate somewhat to the radial side of the wrist; especially is this so when there is also alteration in the plane of the carpal articular surface of the radius.

Special forms of dressings and splints are discussed, as are the various deviations from the classic fracture with backward displacement.

The monograph is exceedingly valuable from every point of view.

J. B. R.

LAKE AND STREAM GAME FISHING. A Practical Book on the Popular Fresh-Water Game Fish, the Tackle Necessary and How to Use It. By DIXIE CARROLL. Stewart & Kidd Company, Cincinnati, 1917. Pp. 251. Price, \$1.75 net.

We most cordially recommend this book in every respect. It is a practical book for the young fisherman to study very carefully and yet is most interesting to the experienced angler. It is written in "pal" to "pal" style from actual experience with just enough of the vernacular of the old fisherman to make the book readable. The author describes carefully the kind of tackle and bait needed for each kind of fishing, and the beginner would not go astray by following his advice carefully. His advice as to learning how to cast is well worded and accurate. His stories of catching some big fish as told by some of their captors is most interesting. Altogether it is one of the best books which has recently been published on this most interesting and fascinating form of recreation.

E. M. G.

THE FUNDUS OCULI OF BIRDS, ESPECIALLY AS VIEWED BY THE OPHTHALMOSCOPE. A Study in Comparative Anatomy and Physiology. By CASEY ALBERT WOOD. Illustrated by 145 drawings in the text, also by 61 colored paintings prepared for this work by ARTHUR W. HEAD, F.Z.S., London. Chicago: Lake Side Press, 1917. 182 pp.

A paragraph from the introduction explains the scope of this research:

The main purpose of this study is to furnish such a description of the intra-ocular appearances and the methods employed in viewing them and will enable ophthalmologists and zoölogists to further this study by examining the eye grounds of birds that come under their observation.

The first impression upon examining this work is the amount of painstaking labor necessary for its preparation. It has taken years of patient investigation which could have been accomplished only by one who is enthusiastically in love with the subject.

Briefly, the work takes up the problem of sight in birds, "the animal that exhibits the highest and most varied types of vision." It was found that changes take place in the eyes of domesticated birds, hence the examination was confined to the wild species. Some representative of most of the Orders of birds are more or

less fully described and illustrated in this atlas. Besides describing the ophthalmoscopic appearance of the living eyes the backgrounds of many were examined after death as to their gross and microscopic appearance.

The work is abundantly illustrated by drawings in the text and further enriched by a remarkable series of colored plates reproducing in *fac simile* the ophthalmoscopic pictures. This imperfect description of the monograph suffices to show its value as a contribution to comparative physiology and of interest as well to every ophthalmologist. C. M.

THE CONVERSION OF HAMILTON WHEELER. A Novelette of Religion and Love Introducing Studies in Religious Psychology and Pathology. By PRESCOTT LOCKE. Pages 285, cloth. Bloomington, Ill. Pandect Publishing Co., 1917.

It may be inferred from the title of this volume that it is a problem story. What that problem is may be inferred by the following quotation from the introduction:

If we are to judge religion by the ultimate results of revivals we must conclude that it is a disease and the medical profession must act through health authorities to abolish and eradicate it as a prophylactic measure as they would eliminate any other parasitic disease or cause of mental alienation.

Elsewhere in the introduction the author says "no pretensions are made for this book as a work of fiction." Again "the author craves the patience of the reader and the limitation of his criticism to the truths set forth." These limitations simplify the work of the reviewer for the story is a flimsy one and the perusal of the prosy preachments of Uncle Austin requires patience. Under it all the main argument can be expressed in the form of a syllogism:

The proximate cause of some cases of insanity is traceable to meetings held by evangelists.

Statistics show that the number of insane under custodial care is increasing rapidly.

Therefore do away with evangelists and their meetings.

C. M.

Among the most excellent of our many excellent exchanges may be placed the *American Journal of Care for Cripples*, notable

at the first glance by the generous margin to the letter press, and of the size of the Journal, the last number received containing about three hundred pages. But closer examination shows that its excellence is not based upon appearance or size, but upon the value of the papers presented, the war furnishing a superabundance of material for its pages. It is making excellent use of its opportunity, so that nearly if not every phase of the subject is receiving proper consideration.

Dr. James A. Spalding, of Portland, Maine, has published the life of his distinguished ancestor, Dr. Lyman Spalding, after years of patient and loving research.

As Dr. Lyman Spalding practised in New England over a century ago, this volume forms an important contribution to the history of medicine in that part of the country.

It is published by W. M. Leonard, 101 Tremont Street, Boston, Mass.

Among the many interesting articles in the June number of the *Interstate Medical Journal*, attention is called to two of timely interest to our readers: "The Neglect of Geriatrics," by Dr. I. L. Nascher, and "Institutional Treatment of Disease," and "Specialization," by Dr. Francis M. Pottenger.

ACKNOWLEDGMENTS.

[It is intended to acknowledge all publications received since the issuing of the last number that are not otherwise noticed. The present list records the publications received (other than periodicals in exchange) from July 10 to September 25, 1917, inclusiv.]

This acknowledgment is considered a full return for the courtesy of sending us the publication. Additional notice will be given when space permits. Publications treating of medico-social questions will be given precedence in the fuller notice.

United States Bureau of Labor Statistics: Bulletin No. 209, Hygiene of the Printing Trades. Bulletin No. 210, Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions. Bulletin No. 213, Labor Legislation of 1916. Bulletin No. 220, Proceedings of the Fourth Annual Meeting of the American Association of Public Employment Officers, Buffalo, N. Y., July 20 and 21, 1916. Bulletin No. 230, Industrial Efficiency and Fatigue in British Munition Factories. Monthly Review, Vol. V, Nos. 1 and 2.

N. Y. State Department of Labor: Bulletin No. 82, Hoods for Removing Dust, Fumes and Gases. Bulletin No. 83, Dangers in Manufacture of Paris Green and Scheele's Green. Bulletin No. 84, New York Labor Laws of 1917. Special Bulletin, Course of Employment in New York State from 1904 to 1916. Proceedings of the First Industrial Safety Congress of New York State, Syracuse, N. Y., December 11-14, 1916.

N. Y. State Industrial Commission: The New York Workmen's Compensation Law with Amendments, Additions and Annotations to July 1, 1917.

Bulletin of the Pennsylvania Department of Labor and Industry, February, March, April and May, 1917.

Carnegie Foundation for the Advancement of Teaching: Eleventh Annual Report of the President and of the Treasurer; Federal Aid for Vocational Education, Bulletin No. 10.

Proceedings and Addresses of the Eighteenth Annual Conference of the Association of American Universities, 1916.

Third Annual Report of the International Health Board of the Rockefeller Foundation, January 1, 1916-December 31, 1916.

Birth Control and That Sort of Thing. By Reynold Webb Wilcox, M.D., D.C.L., New York, N. Y., and reprinted for the *Medical Times*.

First Annual Report of the Department of Commerce Bureau of the Census for 1915.

Second Annual Report of the China Medical Board of the Rockefeller Foundation, January 1, 1916-December 31, 1916.

Seventeenth and Eighteenth Reports of the Michigan Academy of Science, 1915-1916.

A Report to the American People by the Red Cross War Council of the Work in Europe.

Rural Obstetrics. By Grace L. Meigs, M.D. (Reprint.) A Social Study of Mental Defectives in New Castle County, Delaware. By Emma O. Lundberg, Children's Bureau, U. S. Department of Labor, Washington, D. C.

Columbia War Papers, Series 1, No. 17. The War Cripple, by Douglas C. McMurtrie.

Common Colds. By W. C. Rucker, Assistant Surgeon-General, United States Public Health Service.

Sanitation in the Trenches. Bathing Facilities and Habits of the Soldiers and Officers of the Army. By C. C. McCulloch, Jr., M.D.

Fact and Fallacies of Compulsory Health Insurance. By Frederick L. Hoffman, LL.D., 1917. *Prudential Press*, Newark, N. J.

Delaware State Medical Journal, July, 1917. Vol. VIII, No. 7.

Boletín De La Asociación Médica de Puerto Rico, June, 1917. Vol. XIII, No. 114.

How the War Came to America. By the Committee on Public Information.

War Information Series, No. 1, June, 1917.

INSTITUTIONS OF LEARNING.

California: University of California, College of Pharmacy, announcement for 1917-18, 3d s, x, 13, May '17; School of Jurisprudence, announcement for 1917-18, 3d s, x, 14, June '17; Bull., 3d s, x, 15, announcement for 1917-18; Announcement of Courses, 1917-18, Bull., 3d s, xi, 1, July '17; Bull., xi, 2. *Canada:* L'Universite Laval, Annuaire 1917-18; University of Toronto Faculty of Medicine, Calendar for 1917-18. *Colorado:* Colorado College Publication, May and June, 1917. *Illinois:* Northwestern University Bulletin, Annual Catalog, 1916-17; Wheaton College, Bull. xvi, 3, July, 1917. *Iowa:* University of Iowa Monographs, Studies in Medicine, Collected Studies and Reports, Vol. 1, No. 10; Parsons College, Bull. xvii, 2, July, 1917. *Maryland:* University of Maryland School of Medicine and College of Physicians and Surgeons, annual announcement, 1917-18. *Minnesota:* University of Minnesota, Bull. xx, Nos. 10, 14, 15, 23 and 28. *Nebraska:* University of Nebraska, College of Agriculture, Extension Bull. Nos. 39, 45 and 46; University Studies, xvi, 4; xvii, 1. *New York:* Columbia University, Bulls. of Information, 17th s, Nos. 10, 15, 17, 25, 27, 28 and 32. *Ohio:* University of Cincinnati, Record, xiii, 2, April '17. *Washington:* University of Washington, Cat. 1916-17, and Announcements 1917-18.

REPRINTS.

Acknowledgment is made of the receipt of reprints upon topics of medicine other than medical sociology from William Seaman Bainbridge, New York, N. Y.; Henry B. Ward, Urbana, Ill. (4); F. W. Baeslack, M.D., Detroit, Mich.; N. S. Ferry, Detroit, Mich.; Louis J. Hirschman, Detroit, Mich.; Herbert C. Ward, Detroit, Mich. (3).

MEDICO-SOCIAL PROBLEMS LIBRARY

- I. Prevention of Infant Mortality (out of print).
 - II. Conservation of School Children. Cloth, post-paid, five dollars.
 - III. Medical Problems of Immigration. Cloth, post-paid, four dollars.
 - IV. Physical Bases of Crime. Cloth, post-paid, four dollars.
 - V. Industrial Medicine. Cloth, post-paid, three dollars.
 - VI. Medicine an Aid to Commerce. Cloth, post-paid, three dollars.
 - VII. Medical Problems of Legislation. Cloth, post-paid, five dollars.
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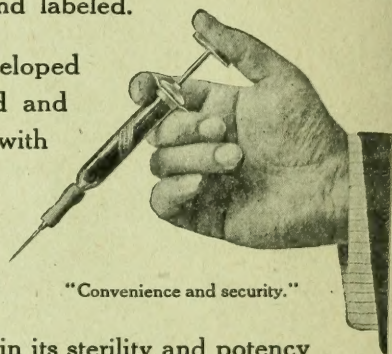
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